

medically necessary, the committee must notify promptly—

- (i) The institution;
- (ii) The individual; and
- (iii) the individual's attending physician.

(t) *Standard: Disclosure of ownership.* The facility must comply with the disclosure requirements of § 420.206 of this chapter.

(u) *Standard: Resident participation.* The facility must ensure resident

participation in the facility's policy and operational decision-making.

(v) *Standard: Independent Medical Evaluation and Audit.* A SNF must cooperate in an effective program which provides for a regular program of independent medical evaluation and audit of the residents in the facility to the extent required by the programs in which the facility participates (including medical evaluation of each resident's need for SNF care).

(Catalog of Federal Domestic Assistance Program No. 13.773, Medicare Hospital Insurance, No. 13.774, Medical Assistance Program.)

Dated: September 14, 1987.

**William L. Roper,**  
Administrator, Health Care Financing Administration.

Approved: September 16, 1987.

**Otis R. Bowen,**  
Secretary.

[FR Doc. 87-23913 Filed 10-13-87; 8:45 am]

BILLING CODE 4120-01-M

# Federal Register

---

Friday  
October 16, 1987

---

## Part III

### Department of the Interior

---

#### Bureau of Indian Affairs

---

#### 25 CFR Part 226

#### Leasing of Osage Reservation Lands for Oil and Gas Mining; Proposed Rule



## DEPARTMENT OF THE INTERIOR

## Bureau of Indian Affairs

## 25 CFR Part 226

## Leasing of Osage Reservation Lands for Oil and Gas Mining

April 10, 1987.

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Proposed rule.

**SUMMARY:** The Bureau of Indian Affairs is publishing a proposed rule to amend the regulations relative to the leasing of the mineral estate of the Osage Tribe of Indians for oil and gas mining. The management of the Osage mineral estate needs to be strengthened to take account of current market conditions and the Osage oil lessees need relief from basing the payment of royalty to the Osage Tribe on the offered or posted price of a major purchaser in the Kansas-Oklahoma area. The promulgation of these amendments to the regulations will improve the management of the Osage mineral estate and will alleviate the economic hardship placed on the oil lessees.

**DATES:** Comments must be received on or before (November 16, 1987).

**ADDRESSES:** Send written comments to Joseph C. Johnston, Chief, Division of Energy and Mineral Resources, Bureau of Indian Affairs, Department of the Interior, 1951 Constitution Avenue NW., MS-340SIB, Washington, DC 20245.

**FOR FURTHER INFORMATION CONTACT:** George E. Tallchief, Osage Tribal Council, Grandview Avenue, Pawhuska, OK 74056, (918) 287-4622 or 4623; Jack Shoemate, Superintendent, Osage Agency, Grandview Avenue, Pawhuska, OK 74056, (918) 287-2481; Cecil O. Wook, Jr., Field Solicitor, Pawhuska, Osage Agency, Grandview Avenue, Pawhuska, OK 74056, (918) 287-2495; Newell Barker, Chief, Branch of Minerals, Osage Agency, Grandview Avenue, Pawhuska, OK 74056, (918) 287-2471.

**SUPPLEMENTARY INFORMATION:**

## Background

The purpose of this proposed rule is to amend 25 CFR 226—Leasing of Osage Reservation Lands for Oil and Gas Mining, to strengthen the management of the Osage Mineral Estate by the Bureau of Indian Affairs and the Osage Tribal Council and to provide economic relief to oil lessees imposed by 25 CFR 226.11(a)(2). These facts are apparent from the management of said Estate and the price of the Osage Tribe is receiving for its royalty oil.

It is the consensus of the BIA and the Osage Tribal Council that the proposed rule which amends 25 CFR 226 will best strengthen the management of the Osage Mineral Estate and will alleviate the necessity for many of the oil lessees to pay the Osage Tribe more for its royalty oil than paid by crude oil purchasers. This may reduce the tribal income; however, such action may curtail the plugging of marginal wells. The proposed rule would be cost effective to the Tribe.

Currently 25 CFR 226.42 and 226.43 provide for penalties for non-compliance. The proposed rule increases such penalties and can be monitored and enforced.

The Osage Tribal Council has conferred with the President, Oklahoma Independent Petroleum Association, concerning 25 CFR 26.11(a)(2). Osage oil and gas lessees were not consulted concerning the strengthening of the management of the Osage Mineral Estate.

## Statutory Authority

The Secretary of the Interior is authorized by the Act of June 28, 1906, section 3, 34 Stat. 539, as amended, to promulgate 25 CFR 226, to implement Section 3 of the 1906 Act, as amended.

The Department of the Interior has determined that this document is not a major rule under E.O. 12291 and certifies that this document will not have a significant economic effect on a substantial number of small businesses under the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.* (1982).

The primary author of this document is the Osage Tribal Council, telephone number (918) 287-4622 or 4623.

Since this document does not constitute a major Federal action under the National Environmental Policy Act of 1969, 42 U.S.C. § 4321 *et seq.* (1982), no environmental impact statements or environmental assessments were made.

The Office of Management and Budget has determined that the information collection requirement contained in this Part need not be submitted for clearance pursuant to 44 U.S.C. 3516 and 5 CFR 1320.20.

This proposed rule is published in the exercise of authority delegated by the Secretary of the Interior to the Assistant Secretary—Indian Affairs by 209 DM 8.

## List of Subjects in 25 CFR Part 226

Indians—lands, Minerals resources, Mines, Oil and gas exploration.

Accordingly, it is proposed to amend 25 CFR Part 226 as set forth below.

## PART 226—LEASING OF OSAGE RESERVATION LANDS FOR OIL AND GAS MINING

1. The authority citation for Part 226 is revised to read as follows:

Authority: Sec. 3, 34 Stat. 543. Sec. 1, 2, 45 Stat. 1478, 1479. Sec. 3, 52 Stat. 1034, 1035. Sec. 2(a), 92 Stat. 1660

2. Section 226.1 is amended by revising paragraph (h) to read as follows:

## § 226.1 Definitions.

(h) "Major purchaser" means any one of the minimum number of purchasers taking 95 percent of the oil in Osage County, Oklahoma. Any oil purchased by a purchaser from itself, its subsidiaries, partnerships, associations, or other corporations in which it has a financial or management interest shall be excluded from the determination of a major purchaser.

## § 226.3–§ 226.45 [Redesignated as § 226.4–§ 226.46]

3. Sections 226.3 through 226.45 are redesignated as §§ 226.4 through 226.46, and a new § 226.3 is added to read as follows:

## § 226.3 Information collection.

The Office of Management and Budget has determined that the information collection requirements contained in this Part need not be submitted for clearance pursuant to 44 U.S.C. 3516 and 5 CFR 1320.20

4. Section 226.7 is amended by revising paragraphs (a) and (c) to read as follows:

## § 226.7 Bonds.

(a) A bond on Form D shall be filed with each lease submitted for approval. Such bond shall be in an amount of not less than \$5,000 for each quarter section or fractional quarter section covered by said lease: *Provided*, however, that one bond in the sum of not less than \$50,000 may be filed on Form G covering all leases on the Osage Mineral Estate not in excess of 10,240 acres to which lessee is or may become a party.

(c) A bond on Form H shall be filed in an amount of not less than \$5,000 covering a lease acquired through assignment where the assignee does not have a collective bond on Form G or nationwide bond, or the corporate surety does not execute its consent to remain bound under the original bond



given to secure the faithful performance of the terms and conditions of the lease.

5. Section 226.12 is amended by revising paragraphs (a)(2) and (b)(1) to read as follows:

**§ 226.12 Royalty payments.**

(a) \* \* \*

(2) Unless the Osage Tribal Council, with approval of the Secretary, shall elect to take the royalty in kind, payment is owing at the time of sale or removal of the oil, except where payments are made on division orders, and settlement shall be based on the highest of the bona fide selling price, posted or offered price by a major purchaser (as defined in § 226.1(h)) in Osage County, Oklahoma, who purchases production from Osage oil leases.

(b) \* \* \*

(1) *Oil lease.* All casinghead gas shall belong to the oil lessee subject to any rights under existing gas leases. All casinghead gas removed from the lease from which it is produced shall be metered unless otherwise approved by the Superintendent and be subject to a royalty of not less than 16⅓ percent of the market value of the gas and all products extracted therefrom, less a reasonable allowance for manufacture or processing. If an oil lessee supplies casinghead gas produced from one lease for operation and/or development of other leases, either his/hers or others, a royalty of not less than 16⅓ percent shall be paid on the market value of all casinghead gas so used. All casinghead gas not utilized or sold by the oil lessee may, with the approval of the Superintendent, be utilized or sold by the gas lessee, subject to the prescribed royalty of not less than 16⅓ percent of the market value.

6. Section 226.14 is amended by revising paragraph (a) to read as follows:

**§ 226.14 Time of royalty payments and reports.**

(a) Royalty payments due may be paid by either purchaser or lessee. Unless otherwise provided by the Osage Tribal Council and approved by the Superintendent, all payments shall be due by the 25th day of each month and shall cover the sales of the preceding month. Failure to make such payments shall subject lessee or purchaser, whoever is responsible for royalty payment, to a late charge at the rate of not less than 1½ percent for each month or fraction thereof until paid. The Osage Tribal Council, subject to the approval

of the Superintendent, may waive the late charge.

7. Section 226.15 is amended by revising paragraph (b) to read as follows:

**§ 226.15 Contracts and division orders.**

(b) The lessee shall require the purchaser of oil and/or gas from his/her lease or leases to furnish to the Superintendent, no later than the 25th day of each month, a statement reporting the gross barrels of oil and/or gross Mcf of gas sold during the preceeding month. The Superintendent may authorize an extension of time, not to exceed 10 days, for furnishing this statement.

8. Section 226.16 is amended by adding a new paragraph (e) to read as follows:

**§ 226.16 Unit leases, assignments and related instruments.**

(e) *Combining leases.* The lessee owning both an oil lease and gas lease covering the same acreage is authorized to convert such leases to a combination oil and gas lease.

9. Section 226.19 is amended by removing paragraph (e) and revising the introductory paragraph and paragraph (d) to read as follows:

**§ 226.19 Information to be given surface owners prior to commencement of drilling operations.**

Except for the surveying and staking of a well, no operations of any kind shall commence until the lessee or his/her authorized representative shall meet with the surface owner or his/her representative, if a resident of and present in Osage County, Oklahoma. Unless waived by the Superintendent, such meeting shall be held at least 10 days prior to commencement of any operations, except for the surveying and staking of the well. At such meeting lessee or his/her authorized representative shall comply with the following requirements:

(d) When the surface owner or his/her representative is not a resident of, or is not physically present in, Osage County, Oklahoma, or cannot be contacted at the last known address, the Superintendent may authorize lessee to proceed with operations.

10. Section 226.20 is amended by revising paragraphs (a), (b) and (d) to read as follows:

**§ 226.20 Use of surface of land.**

(a) Lessee or his/her authorized representative shall have the right to use so much of the surface of the land within the Osage Mineral Estate as may be reasonable for operations and marketing. This includes but is not limited to the right to lay and maintain pipelines, electric lines, pull rods, other appliances necessary for operations and marketing, and the right-of-way for ingress and egress to any point of operations. If lessee and surface owner are unable to agree as to the route of pipelines, electric lines, etc., said route shall be set by the Superintendent. The right to use water for lease operations is established by § 226.24. Lessee shall conduct his/her operations in a workmanlike manner, commit no waste and allow none to be committed upon the land, nor permit any avoidable nuisance to be maintained on the premises under his/her control.

(b) Before commencing a drilling operation, lessee shall pay or tender to the surface owner commencement money in the amount of \$25 per seismic shot hole and commencement money in the amount of \$300 for each well, after which lessee shall be entitled to immediate possession of the drilling site. Commencement money will not be required for the redrilling of a well which was originally drilled under the current lease. A drilling site shall be held to the minimum area essential for operations and shall not exceed one and one-half acres in area unless authorized by the Superintendent. Commencement money shall be a credit toward the settlement of the total damages. Acceptance of commencement money by the surface owner does not affect his/her right to compensation for damages as described in § 226.20, occasioned by the drilling and completion of the well for which it was paid. Since actual damage to the surface from operations cannot necessarily be ascertained prior to the completion of a well as a serviceable well or dry hole, a damage settlement covering the drilling operation need not be made until after completion of drilling operations.

(d) Lessee shall also pay fees for tank sites not exceeding 50 feet square at the rate of \$100 per tank site or other vessel: *Provided*, that no payment shall be due for a tank temporarily set on a well location site for drilling, completing, or testing. The sum to be paid for a tank occupying more than 50 feet square shall be agreed upon between the surface owner and lessee or, on failure to agree,



the same be determined by arbitration as provided by § 226.21.

11. Section 226.22 is amended by revising paragraph (f) to read as follows:

**§ 226.22 Procedure for settlement of damages claimed.**

(f) Any two of the arbitrators may make a decision as to the amount of damage due. The decision shall be in writing and shall be served forthwith upon the parties in interests. Each party shall have 90 days from the date the decision is served in which to file an action in a court of competent jurisdiction. If no such action is filed within said time and the award is against lessee or his/her authorized representative, he/she shall pay the same, together with an interest at an annual rate established for the Internal Revenue Service from date of award, within 10 days after the expiration of said period for filing an action.

12. Section 226.23 is amended by revising paragraph (b) and (e) to read as follows:

**§ 226.23 Prohibition of pollution.**

(b) Pits for drilling mud or deleterious substance used in the drilling, completion, recompletion, or workover of any well shall be constructed and maintained to prevent pollution of surface and subsurface fresh water. These pits shall be enclosed with a fence of at least four strands of barbed wire, or an approved substitute, stretched taut to adequately braced corner posts, unless the surface owner, user, or the Superintendent gives consent to the contrary. Immediately after completion of operations, pits shall be emptied and leveled unless otherwise requested by surface owner or user.

(e) Deleterious fluids other than fresh water drilling fluids used in drilling or workover operations, which are displaced or produced in well completion or stimulation procedures including but not limited to fracturing, acidizing, swabbing, and drill stem tests, shall be collected into a pit lined with plastic of at least 30 mil or a metal tank and maintained separately from above-mentioned drilling fluids to allow for separate disposal.

13. Section 226.24 is revised to read as follows:

**§ 226.24 Easements for wells off leased premises.**

The Superintendent, with the consent of the Osage Tribal Council, may grant commercial and non-commercial

easements for wells off the leased premises to be used for purposes associated with oil and gas production. Rental payable to the Osage Tribe for such easements shall be an amount agreed to by Grantee and the Osage Tribal Council subject to the approval of the Superintendent. Grantee shall be responsible for all damages resulting from the use of such wells and settlement therefor shall be made as provided in § 226.21.

14. Section 226.26 is revised to read as follows:

**§ 226.26 Gas well drilled by oil lessees and vice versa.**

Prior to drilling, the oil or gas lessee shall notify the other lessee of his/her intent to drill. When an oil lessee in drilling a well encounters a formation or zone having indications of possible gas production, or the gas lessee in drilling a well encounters a formation or zone having indication of possible oil production, he/she shall immediately notify the other lessee and the Superintendent. Lessee drilling the well shall obtain all information which a prudent operator utilizes to evaluate the productive capability of such formation or zone.

(a) Gas well to be turned over to gas lessee. If the oil lessee drills a gas well, he/she shall, without removing from the well any of the casing or other equipment, immediately shut the well in and notify the Superintendent. If the gas lessee does not, within 45 days after receiving notice and cost of drilling, elect to take over such well and reimburse the oil lessee for the cost of drilling, including all damages paid and the cost in-place of casing, tubing, and other equipment, the oil lessee shall immediately confine the gas to the original stratum. The disposition of such well and the production therefrom shall then be subject to the approval of the Superintendent. In the event the oil lessee and gas lessee cannot agree on the cost of the well, such cost shall be apportioned between the oil and gas lessee by the Superintendent. If such apportionment is not accepted, the well shall be plugged by the oil or gas lessee who drilled the well.

(b) Oil well to be turned over to oil lessee. If the gas lessee drills an oil well, he/she shall immediately, without removing from the well any of the casing or other equipment, notify the oil lessee and the Superintendent. If the oil lessee does not, within 45 days after the receipt of such notice and notice of the cost of drilling, elect to take over the well, he/she shall immediately notify the gas lessee, and the disposition of such well and the production therefrom shall be

subject to the approval of the Superintendent. Should the oil lessee elect to take over the well, he/she shall pay the gas lessee for the cost of drilling, including all damages paid and cost in-place of casing, tubing, and other equipment. In the event the oil lessee and gas lessee cannot agree on the cost of the well, such cost shall be apportioned between the oil and gas by the Superintendent. If such apportionment is not accepted, the well shall be plugged by the oil or gas lessee who drilled the well.

(c) *Lands not leased.* If the gas lessee shall drill an oil well upon lands not leased for oil purposes or vice versa, the Superintendent may, until such time as said lands are leased, permit the lessee who drilled the well to operate and market the production therefrom. When said lands are leased, the lessee who drilled and completed the well shall be reimbursed by the oil or gas lessee for the cost of drilling said well, including all damages paid and the cost in-place of casing, tubing, and other equipment. If the lessee does not elect to take over said well as provided above, the disposition of such well and the production therefrom shall be determined by the Superintendent. In the event the oil lessee and gas lessee cannot agree on the cost of the well, such cost shall be apportioned between the oil and gas lessee by the Superintendent. If such apportionment is not accepted, the well shall be plugged by the oil or gas lessee who drilled the well.

15. Section 226.29 is amended by revising the introductory paragraph and paragraph (a) and adding a new paragraph (c) to read as follows:

**§ 226.29 Shutdown, abandonment, and plugging of wells.**

No productive well shall be abandoned until its lack of further profitable production of oil and/or gas has been demonstrated to the satisfaction of the Superintendent. Lessee shall not shut down, abandon, or otherwise discontinue the operation or use of any well for any purpose without the written approval of the Superintendent. All applications for such approval shall be submitted to the Superintendent on forms furnished by him/her.

(a) Application for authority to permanently shut down or discontinue use or operation of a well shall set forth justification, probable duration, the means by which the well bore is to be protected, and the contemplated eventual disposition of the well. The method of conditioning such well shall



be subject to the approval of the Superintendent.

(c) The Superintendent is authorized to shut in a lease when the lessee fails to comply with the terms of the lease, the regulations, and/or orders of the Superintendent.

16. Section 226.30 is amended by revising paragraph (a) to read as follows:

**§ 226.30 Disposition of casings and other improvements.**

(a) Upon termination of lease, permanent improvements, unless otherwise provided by written agreement with the surface owner and filed with the Superintendent, shall remain a part of said land and become the property of the surface owner upon termination of the lease, other than by cancellation. Exceptions include personal property not limited to tools, tanks, pipelines, pumping and drilling equipment, derricks, engines, machinery, tubing and the casings of all wells: *Provided*, that when any lease terminates, all such personal property shall be removed within 90 days or such reasonable extension of time as may be granted by the Superintendent. Otherwise, the ownership of all casings shall revert to lessor and all other personal property and permanent improvements to the surface owner. Nothing herein shall be construed to relieve lessee of responsibility for removing any such personal property or permanent improvements from the premises if required by the Superintendent and restoring the premises as nearly as practicable to its original state.

17. Section 226.34 is revised to read as follows:

**§ 226.34 Line drilling.**

Lessee shall not drill within 300 feet of boundary line of leased lands, nor locate any well or tank within 200 feet of any public highway, any established watering place, or any building used as a dwelling, granary, or barn, except with the written permission of the Superintendent. Failure to obtain advance written permission from the Superintendent shall subject lessee to

cancellation of his/her lease and/or plugging of the well.

18. Section 226.35 is revised to read as follows:

**§ 226.35 Wells and tank batteries to be marked.**

Lessee shall clearly and permanently mark all wells and tank batteries in a conspicuous place with number, legal description, operator, and telephone number, and shall take all necessary precautions to preserve these markings.

19. Section 226.37 is revised to read as follows:

**§ 226.37 Control devices.**

In drilling operations in fields where high pressures, lost circulation, or other conditions exist which could result in blowouts, lessee shall install an approved gate valve or other controlling device which is in proper working condition for use until the well is completed. At all times preventative measures must be taken in all well operations to maintain proper control of subsurface strata.

20. Section 226.43 is revised to read as follows:

**§ 226.43 Penalty for violation of lease terms.**

Violation of any of the terms or conditions of any lease or of the regulations in this part shall subject the lease to cancellation by the Superintendent, or lessee to a fine of not more than \$500 per day for each day of such violation or non-compliance with the orders of the Superintendent, or to both such fine and cancellation. Payment of penalties not received within 10 days after notice of the decision shall be subject to late charges at the rate of not less than 1½ percent per month for each month or fraction thereof until paid. The Osage Tribal Council, subject to the approval of the Superintendent, may waive the late charge.

21. Section 226.44 is amended by adding a new paragraph (j) and revising paragraphs (a), (b), (d), (e), (g) and (h) to read as follows:

**§ 226.44 Penalties for violation of certain operating regulations.**

(a) For failure to obtain permission to start operations required by § 226.16(b), \$50 per day until permission is obtained.

(b) For failure to file records required by § 226.32, \$50 per day until compliance is met.

(d) For failure to construct and maintain pits as required by § 226.22, \$50 for each day after operations are commenced on any well until compliance is met.

(e) For failure to comply with § 226.36 regarding valve or other approved controlling device, \$500.

(g) For failure to properly care for and dispose of deleterious fluids as provided in § 226.22, \$500 per day until compliance is met.

(h) For failure to file plugging reports as required by § 226.29 and for failure to file reports as required by § 226.13, \$50 per day for each violation until compliance is met.

(j) Lessee or his/her authorized representative is hereby notified that criminal penalties are provided by 18 U.S.C. 1001 for knowingly filing fraudulent reports and information.

22. Section 226.45 is revised to read as follows:

**§ 226.45 Hearings and appeals.**

Any person, firm or corporation aggrieved by any decision or order issued by or under the authority of the Superintendent, pursuant to the regulations in this part, may appeal pursuant to 25 CFR Part 2.

23. Section 226.46 is revised to read as follows:

**§ 226.46 Notices.**

Notices and orders issued by the Superintendent to the representative and/or operator shall be binding on the lessee. The Superintendent may in his/her discretion increase the time allowed in his/her orders and notices.

Ross O. Swimmer,  
Assistant Secretary—Indian Affairs.

October 9, 1987.

[FR Doc. 87-23844 Filed 10-15-87; 8:45 am]

BILLING CODE 4310-02-M







# Fast Facts

---

Friday  
October 16, 1987

---

## Part IV

### Department of Transportation

---

#### Coast Guard

46 CFR Part 1 et al.

Licensing of Maritime Personnel, Pilots,  
Officers, and Operators for Mobile  
Offshore Drilling Units; Interim Rules



**DEPARTMENT OF TRANSPORTATION****Coast Guard**

46 CFR Parts 1, 10, 15, 26, 35, 157, 175, 185, 186, and 187

[CGD81-059]

**Licensing of Maritime Personnel**

**AGENCY:** Coast Guard, DOT.

**ACTION:** Interim final rule.

**SUMMARY:** The Coast Guard is amending the regulations concerning the licensing of maritime personnel and the manning of vessels. This rule modifies all of the regulations contained in Parts 10, 15, 26, 157, 186 and 187 concerning the licensing of individuals, the registration of staff officers, and the manning of vessels. This rule simplifies the license structure for ocean and inland service, deletes many trade restricted licenses and examinations, simplifies the license procedure, adds tables, charts, and flow diagrams, and redesigns the format of the regulations. It also establishes new licenses by replacing many other trade restricted licenses; furthermore, this rule revises manning regulations contained in Part 157 to reflect technological developments, the recodification of Title 46, United States Code (USC), and changes in terminology associated with merchant vessel manning. Part 157 is also relocated to Part 15 for convenience. In addition to the amendments to licensing and manning regulations, many other changes have been made in Parts 175 and 185 to conform with proper terminology, e.g., master and mate versus operator of small passenger vessels.

**DATES:** This regulation is effective on December 1, 1987, except sections 10.205(g) and 10.207(f) which will be effective December 1, 1988. Comments must be received by January 14, 1988.

**ADDRESSES:** Comments should be submitted to: The Executive Secretary, Marine Safety Council (G-CMC/21) [CGD 81-059] U.S. Coast Guard, Washington, DC 20593-0001. Between 8:00 a.m. and 3:00 p.m., Monday through Friday, comments may be delivered to and will be available for inspection or copying at the Marine Safety Council (G-CMC), Room 2110, U.S. Coast Guard Headquarters, 2100 Second Street SW., Washington, DC 20593-0001, (202) 267-1477.

**FOR FURTHER INFORMATION CONTACT:** LCDR Gerald D. Jenkins, Project Manager, Office of Merchant Marine Safety, Security, and Environmental Protection, (G-MVP), phone (202) 267-0224.

**SUPPLEMENTARY INFORMATION:** Although this is an interim final rule, additional changes will be made, where warranted. Therefore, interested persons are invited to participate in evaluating this rule by submitting written data, views, or arguments. Written comments should include the name and address of the person making them, identify this interim final rule (CGD 81-059), the specific section of the interim final rule to which the comment applies, and the reason for the comment. Persons desiring an acknowledgement that their comment has been received should enclose a stamped, self-addressed postcard or envelope. All comments received before expiration of the comment period will be considered before a decision is made to modify or confirm the interim rule.

The Coast Guard published an Advance Notice of Proposed Rulemaking (ANPRM) in October of 1981 (46 FR 53624) which outlined the basic philosophy and concepts for this project. The Coast Guard received approximately 75 written comments to the docket on that ANPRM. A Notice of Proposed Rulemaking (NPRM) was published on August 8, 1983, (48 FR 35920). Over 10,000 copies of this notice were mailed out to the public and 19 public meetings were held around the country. This notice elicited over 700 written comments and thousands of telephone inquiries. A Supplemental Notice of Proposed Rulemaking (SNPRM) was published on October 24, 1985 (50 FR 43316), after which the Coast Guard held public hearings in Seattle, Washington; San Francisco, California; Houston, Texas; New Orleans, Louisiana; New York, New York; and Washington, DC. A cumulative total of over 1300 comments have been received and docketed on this project.

When the Supplemental Notice of Proposed Rulemaking was published, the licensing and manning proposals applicable to mobile offshore drilling units were separated and published under docket number CGD-81-059a (50 FR 43366). The Coast Guard has continued to separate the licensing and manning rules dealing with mobile offshore drilling units publishing a separate interim final rule in this issue.

The provisions of Part 10 dealing with pilot licenses were published as a final rule on June 24, 1985 (50 FR 26106) and modified on December 23, 1985 (50 FR 52329). These rules have been reformatted to match the format and organization of these rules and eliminate duplicate provisions. All the reformatted provisions (except for the exam topics which have been included in Subpart I of this interim final rule) are published

as another interim final rule under docket number CGD 81-059b appearing elsewhere in this issue.

The preamble section of the supplemental notice discussed many individual areas of concern; similarly, the interim final rule discusses areas of concern in the same format. The changes that have been incorporated into the interim final rule are explained under the "specific comment areas." Because of the adjustments made since the supplemental notice this rulemaking is being published as an interim final rule subject to comments.

**Drafting Information**

The principal drafters of this interim final rule are: CDR George N. Naccara, Office of Merchant Marine Safety, and CDR Ronald C. Zabel, Office of Chief Counsel.

**Background**

This interim final rule implements the provisions of Public Law 96-378 and the Port and Tanker Safety Act of 1978. Public Law 96-378 discussed the establishment of career patterns, service and qualifying requirements, substitution of training time and courses of instruction for sea service on deck or in the engine department. The Port and Tanker Safety Act of 1978 required improved pilotage standards, qualification for licenses by the use of simulators, minimum health and physical fitness criteria, and periodic retraining and special training for upgrading positions.

The structure and basic qualifications for licenses have been designed to conform to the provisions of the International Convention on the Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978. While the United States has not yet ratified this Convention, the United States delegation was an active participant in the drafting of the Convention and has participated in ensuing interpretations of the Convention. The Convention entered into force internationally in April, 1984. Having the structure and basic qualifications of licenses issued by the Coast Guard in general conformance to the STCW will facilitate their acceptance by the countries that have ratified the STCW.

Under the STCW Convention, a certification stamp is required on each license. This stamp, which must be placed on the face of the license, reads, in effect, "this license complies with the provisions of (the specific regulation) of the International Convention for the Standards of Training, Certification and



Watchkeeping for Seafarers, 1978, with limitations as noted." This certification is discussed in the Convention and will be contained on all licenses issued by signatory nations.

Public Law 98-89 of August 20, 1983, revised and consolidated certain laws relating to vessels and merchant seamen contained in Title 46, United States Code. These changes also necessitated some amendments to the licensing and manning regulations.

For some time the Coast Guard had planned to revise the licensing and manning regulations purely from an administrative point of view. This rule greatly simplifies the existing regulations and provides examples, reference tables, and license structure diagrams which will assist the mariner and the Coast Guard administrators. Much of the basics of the existing licensing system, which has served the United States well for many years have been utilized. The text has been simplified and we have added or deleted licenses as necessary to reflect the changing marine industry, the statutory mandates, and also guidance from the international community.

Much of the discussions at the public hearings and many of the comments in the docket expressed the concern that the United States had lowered the standards of its licensing system and had included the provisions of an international convention which was not yet domestic law. The Coast Guard's position is that this interim final rule maintains the high standards and recognition which the U.S. system has developed over many years and that conformity to internationally accepted standards promotes continued recognition of the quality of U.S. licenses.

#### Discussion of Comments

It was very encouraging to note the quality and constructive criticism contained in the comments received. The final rule was prepared not only with the written comments in mind, but also the discussions held at the public hearings and the comments on the previous notices of proposed rulemaking. The format of the supplemental notice with specific comment areas in the preamble was well received and that format is used in discussing the modifications in the interim final rule. Revised versions of the license structure charts and the quick reference table are included in the interim final rule. Specific topic listings for every license examination are included in the interim final rule. A table similar to that previously proposed for engineers has been designed for the

deck officers as there was much support in the comments for a simplified table with references for all licenses and exam topics.

#### Specific Comment Areas

1. *Public hearings:* After publication of the supplemental notice, six hearings were held in Seattle, Washington; San Francisco, California; Houston, Texas; New Orleans, Louisiana; New York, New York; and Washington, D.C. Prior to the public hearings, the Coast Guard sent 2500 copies of the proposal to persons and organizations on a mailing list and to large associations for reprinting and dissemination to their membership. At the public hearings, the Coast Guard, in a departure from standard public hearing format, introduced the supplemental notice, discussed the highlights of the notice, and then responded immediately to most of the comments presented at the hearing. The hearings were very constructive to the rulemaking process. Public hearings are not scheduled on this interim final rule; however, if any substantive new proposals are received, which have not already been considered through this lengthy rulemaking project, a hearing may be scheduled.

2. *The STCW provisions:* As in the notices of proposed rulemaking, the provisions of the STCW Convention are included in the interim final rule. The Coast Guard has supported the intent of the Convention since its completion in 1978. Inclusion of the provisions of the Convention has been accomplished in a manner considered to be acceptable to all segments of the marine industry. The effects of the Convention have been mitigated by equating the present system, in many cases, to that required by the Convention. Some licensing standards have been raised by including specialized training in certain categories of licenses. The previously proposed designated duty engineer has been retained, although the license structure for those engineers has been changed and license crossovers have also been modified to reflect the comments received.

3. *High standards of U.S. licenses:* Many comments stated the opinion that the U.S. licensing standards were being lowered by the proposals. The strong message contained in the comments was that some proposed changes to the examination and qualification process were not warranted. As a result of these comments, the interim final rule has been modified to:

a. Require that an examination be taken for second mate and second assistant engineer as in the current system;

b. Provide license progression opportunities from the limited license categories at the third mate or third assistant engineer level;

c. Require all license holders to obtain CPR training for license renewals;

d. Extend firefighting training requirements to service on vessels in inland waters;

e. Tighten the license reexamination procedures; and,

f. Require a statement attesting to the physical condition of the applicant for a license renewal and raise of grade.

4. *Present authority under current licenses:* Many commenters were concerned that they would lose authority granted to them under their present licenses. For ease of understanding the transition to the proposed licenses, a cross-over chart is included in this interim rule. Furthermore, the Coast Guard has attempted to address every possible situation in which a person could convert to a license in the new system with a different route or tonnage limitation. In general, the authority granted under most limited licenses has been expanded; however, there are some situations where existing license routes (such as lakes, bays, and sounds) authorized people to serve on waters which are presently outside of the demarcation lines and require the application of the International Regulations for Preventing Collisions at Sea (COLREGS). Most of these situations have been resolved in this interim final rule and, where they do not fully meet the situation of the license holder, the matter will be resolved on an individual basis at a Regional Examination Center. It is not the Coast Guard's intention to remove any authority which a person presently holds under an existing license when converting to any license in the new system.

5. *Tonnage Convention:* Some comments requested a discussion of the impact of the 1969 Tonnage Convention on the licensing regulations. In the notices of August 1983 and October 1985, it was noted that the probable effect of the Tonnage Convention would be higher vessel gross tonnages. It is assumed that the proposed license tonnage categories will resolve most problems in that the primary vessels affected by the Tonnage Convention will remain in 200-1600 gross tons category. When the implementing legislation and regulations come into effect for the Tonnage Convention, the Coast Guard will make every attempt to allow merchant mariners to continue service on those vessels on which they are



presently employed. That may require specific tonnage endorsements on individual licenses or it may require conversion to licenses with higher tonnage limits in the new system. In either case, the individual will not be penalized by the effects of differing tonnage as calculated under the international Tonnage Convention system, or the standard register tonnage system.

6. *Transition to new licensing system:* Comments were received asking the Coast Guard to simplify transition to the new system. The Coast Guard will implement the policy which was proposed initially, that is, permit a person to convert to the new system upon renewal of their license. In addition, if a job opportunity requires the new type of license, the applicant may obtain a new license at any time after the effective date of the regulations.

7. *Dividing line for inland and ocean licenses:* As in the original notice of proposed rulemaking and the supplemental notice, there was much debate on the line separating inland from ocean licenses. The original proposals utilized the territorial sea baseline. The supplemental notice proposed the COLREGS demarcation line. This interim final rule adopts the Boundary Lines. The Boundary Lines, as discussed in 46 CFR Part 7, are used for many other marine safety purposes. The line is generally well-known and supports the concept of inland and ocean license distinctions, despite the fact that the Boundary Lines frequently extend beyond the COLREGS lines. As a result, those license holders with inland licenses who have not been tested on the COLREGS must have an exclusion added to their license. This exclusion will not permit service on COLREGS waters until the license holder completes an examination on the COLREGS.

8. *Great Lakes and inland licenses:* In the interim final rule, the Coast Guard has retained the Great Lakes and inland licensing schemes which were proposed in the supplemental notice. No comments were received on this issue. The deck license categories for 200 gross tons, 1600 gross tons, and the unlimited category are retained as before. The engineer licenses are consistent, as in the past, with the unlimited horsepower category. The interim final rule continues the career progression from the Great Lakes and inland licenses to near coastal licenses and eventually to an unlimited license for ocean service with appropriate examinations.

9. *License transition for certain inland licenses:* Many comments were received

concerning the transition from inland licenses, such as master of vessels upon lakes, bays, and sounds, to the licenses in the new system, such as master of vessels upon Great Lakes and inland waters. In general, the new inland licenses authorize service out to the Boundary Line. This should be consistent with current license limitations for the lakes, bays, and sounds licenses; however, as stated before, applicants who are not tested on the COLREGS must have a route exclusion placed upon their licenses.

10. *Partial exams required for license crossovers:* A number of comments questioned whether partial exams will be required for license crossovers or raises in grade. Raises of grade will require the complete examination for the license desired. Crossovers will require limited examinations only if specified in regulation.

11. *Service requirements for certain crossovers of licenses and sail/auxiliary sail endorsements:* There were a substantial number of comments regarding the proposed experience requirements for deck and engineer license progressions and also for the sail or auxiliary sail endorsement. Generally, the comments expressed the concern that the Coast Guard had reduced the necessary experience requirements thus lowering safety levels for many licenses. The Coast Guard agrees, and for certain licenses and endorsements, has increased the required service in amounts varying between three to nine months over that proposed in the supplemental notice.

12. *Visual acuity requirements for license:* Upon reconsideration of the proposed visual acuity standards, with support from a comment to the docket and with the advice of medical doctors in the Coast Guard, a minor change is made in the interim final rule. The comment and the doctors were concerned about the loss of depth perception that would result with uncorrected vision. The interim final rule continues the existing standard of requiring uncorrected vision of at least 20/200 in each eye (emphasis added) rather than, as proposed, in the better eye.

13. *Use of physician assistant for physical examinations:* Some comments suggested that physician assistants (PA) be allowed to conduct the required physical examination for license applicants. The Coast Guard agrees with this concept since the emphasis of a PA's training is the performance of physical exams and they must always practice under the supervision of a licensed physician. Therefore, in the interim final rule, as required for

original, raise of grade, or renewal of license, the physical exam may be conducted by either a licensed physician or a licensed physician assistant.

14. *Firefighting training:* Most comments supported the firefighting training requirements for licenses. Once again, many comments supported firefighting training for inland licenses as well as offshore licenses. In the interim final rule, firefighting training is required for licenses of all vessels of over 200 gross tons, regardless of route (inland or ocean/near coastal). In addition, this training is required for masters of vessels of not more than 200 gross tons engaged in ocean service and for operators of uninspected towing vessels on ocean (domestic trade) waters. Firefighting training is also required for all engineer licenses. Firefighting training is presently available at 14 schools which have received interim approval for their training courses. The firefighting training for licensed personnel will consist of a combined course that includes the basic and the advanced curriculum as proposed by the International Maritime Organization (IMO). The Coast Guard is not requiring refresher firefighting training; rather, it is expected that mariners will maintain their firefighting proficiency through shipboard firefighting drills and instructions.

15. *License examination topics:* As a result of the many favorable comments received concerning the engineer license examination table and complaints about the manner of the presentation of the topics for deck licenses, the interim rule includes a table for all deck license topics. Although this is a multi-page table, it presents the list of exam topics in a much clearer and concise manner. The applicant can simply compare the different examination topics for every level of license in any progression.

16. *Signaling (flashing light) requirements for licenses:* Many comments again requested that the signaling requirements for limited licenses be discontinued. Previous proposals had suggested testing at a reduced rate on flashing light for licenses which authorize service on vessels of over 150 gross tons. Due to the comments received the Coast Guard has decided that the flashing light portion of the deck license exams will not be required except for licenses which authorize service on vessels above 1,600 gross tons in ocean or near coastal waters.

17. *Oral or orally assisted examination:* Many comments were received which opposed the permitting of oral or orally assisted examinations



for any type of license. These comments suggested that the ability of a licensed individual to read instructions or navigation publications was essential to the safe operation of a vessel.

The Coast Guard is of the opinion that justification exists for the continued use of oral examinations, without adversely affecting safety. Some individuals with extensive maritime experience have educational achievement levels which prevent the reading of written examinations. On shipboard, these individuals routinely have assistance from shipmates when reading or writing skills are required. As in the supplemental notice, the Coast Guard will continue to allow orally assisted examinations for deck or engineering licenses permitting service on vessels of up to 500 gross tons. When issued, these licenses will be restricted to the limited route upon which the qualifying experience was obtained.

**18. License reexamination scheduling:** Many comments were received recommending a major modification to the present reexamination schedule for all licenses. The proposed rules suggested an examination scheme which has been tested in Regional Examination Centers during the past two years. In addition to the opposition to the proposed rules expressed in the comments, the Coast Guard's field experience indicates the proposed system is unsatisfactory. Therefore, the Coast Guard has decided to adopt to an examination schedule more closely aligned to that which exists in current regulations. The guidelines for reexamination scheduling in the interim final rule are similar to the current system; however, some minor changes have been made to assist the license applicant and to allow the Officer in Charge, Marine Inspection (OCMI) some flexibility in scheduling examinations.

**19. Familiarity with the characteristics of each vessel:** As discussed in comments and at the public hearings, section 10.101(b) has been strengthened to require that each licensee become familiar with the relevant characteristics of each vessel prior to assuming their duties. The Coast Guard recognizes the uniqueness of many vessels and particularly the installed equipment on the vessels. Further, with the removal of most license trade restrictions, it becomes even more important that the persons in all responsible positions in the crew be familiar (even to the point of formal or informal training) with the equipment listed.

**20. First Aid and CPR requirements:** Due to support in the written comments and at the public hearings for increased

emphasis on first aid and cardiopulmonary resuscitation (CPR) training, the interim final rule requires all applicants for original licenses to have first aid and CPR training. Furthermore, for all license renewals, applicants must present evidence of completing a CPR course within the past 12 months. The American Heart Association requires annual refresher training to keep the CPR qualification current. The Coast Guard recognizes that sea service demands make adoption of an annual refresher requirement impractical. Requiring CPR recertification incident to license renewal should maintain the availability of CPR capable persons on most vessels. While this requirement will add minimal cost to license applications and renewals, the complete dependence on the skills of other crew members in case of an emergency justifies this additional training.

**21. Requirements for pilot license renewal:** The comments to the supplemental notice continued to strongly oppose one specific requirement for the renewal of a pilot license; i.e., the affidavit attesting to involvement in marine casualties. The comments were concerned with the self-incrimination aspect of this requirement and asserted that the Coast Guard already has the information available from casualty records. This requirement has been removed from the interim rule and the Coast Guard will rely on its existing casualty records system to identify those persons whose qualifications may be suspect.

**22. Continuing education and training:** The Coast Guard's policy is to encourage additional formal training. This is in accord with international developments and was supported by many comments addressing the issue. The initiatives for training in the interim rule will result in a more qualified and well-rounded mariner, and allow substitution of training time in an approved course for a portion of the required sea service for many licenses. New technological advances are partially responsible for these provisions because vessels' equipment and operating methods have become increasingly sophisticated. A mariner must keep abreast of new maritime practices in order to remain competent and perform at the high levels demanded of him or her. Another important consideration is the introduction of reduced manning on new vessels, which limits opportunities for mariners to pursue training while underway. The Coast Guard's position is that shore based training can provide skills equal to or greater than that

gained by experience during normal sea service. This approach is supported by international agreements and conventions which specifically recommend various training courses and allow the substitution of training for underway service. In order for these training courses to be accepted by the Coast Guard, they must be "approved" which means that the course, the curriculum, physical plant, the instructors and all pertinent details of an educational program must be evaluated by the local Coast Guard OCMI and approved by Coast Guard Headquarters. The approved course may be substituted for a part of an examination, for required training, or for sea service time required for licenses and certificates, as appropriate. The Coast Guard recognizes that a certain amount of sea service is essential to ensure that mariners get the practical experience needed by competent professionals; however, the importance of formal training must also be recognized. By providing an incentive for mariners and ensuring that the schools are quality training institutions, the Coast Guard hopes to encourage mariners to attend these approved courses.

**23. Requirements for third mate or third assistant engineer licenses:** Comments suggested that military personnel (Navy and Coast Guard) may not have sufficient experience to qualify for third mate or third assistant engineer license upon graduation from an academy. The Coast Guard partially agrees. In order to qualify for these licenses, these graduates must now also complete either an underway officer of the deck training qualification program, or complete an on-board engineer officer qualification program, as appropriate for the deck or engineer license.

**24. Recency requirements for military personnel obtaining a merchant marine license:** Comments on this topic were mixed in support of and in opposition to the waiver of a requirement for military personnel to have recent sea experience. As proposed initially, the recency of service requirement in the interim rule is established for all licenses as three months of experience within the last 36 months. This requirement also applies to military personnel. The nature of military service does not justify a waiver of this requirement and the necessity to show recent service is an integral requirement of license qualifications.

**25. Engineer licenses:** Many comments were received concerning the title and nature of experience required for the various engineer licenses that were



proposed. The small vessel industry (mineral and oil industry) supported the expanded designated duty engineer concept, while the deep sea industry was concerned about permitting crossovers into unlimited licenses. In response to the comments, the Coast Guard has retained a designated duty engineer (DDE) title which is now limited to vessels of 500 gross tons. Horsepower limitations are still dependent upon the total amount of service on vessels, however, the interim rule adds two intermediate steps in that license scheme. The primary purpose of these steps is to allow seamen to enter the engineering field and obtain licenses at levels comparable to deck personnel. The first intermediate step license issued will be a designated duty engineer with one year of service, restricted to vessels of not more than 1,000 horsepower, with a route restriction to near coastal waters. The designated duty engineer limited to not more than 1,000 horsepower must complete a minimal examination. The second step will be the 4,000 horsepower designated duty engineer, which is also limited to near coastal routes. The designated duty engineer limited to not more than 4,000 horsepower would not take an examination if one was taken for the 1,000 horsepower license. The third step will be the designated duty engineer serving on any horsepower vessels limited to 500 gross tons upon ocean waters. The complete designated duty engineer of any horsepower examination would be required even if a limited horsepower license had previously been held. Comments requested that the Coast Guard make it possible to obtain the designated duty engineer of any horsepower directly with three years of total service. The Coast Guard agrees and has incorporated this concept into the interim rule.

We are also re-instituting the chief engineer (limited) and assistant engineer (limited) licenses in the interim final rule. These limited licenses were proposed in the original notice of August 1983 and have been included in this interim final rule to satisfy particular engineering needs. These licenses will assist certain types of inland and ocean-going vessels in complying with the STCW Convention, primarily those vessels of over 500 gross tons in ocean service. The chief engineer (limited) and assistant engineer (limited) licenses allow service on inland waters (other than the Great Lakes) on vessels of any gross tons, e.g., ferry vessels and large inland passenger vessels. They also

allow service on vessels in ocean service of not more than 1600 gross tons. Horsepower limitations will be set commensurate with the experience of the applicant. The license as chief engineer (limited) upon oceans requires five years of total experience and complies with the STCW.

Many comments were concerned about the high level of crossover for DDE and expressed the belief that more experience was necessary to become a second assistant engineer. In response to these comments, a crossover has been established from the designated duty engineer to assistant engineer (limited) and further to the third assistant engineer (unlimited) license.

**26. Chief and assistant engineer (limited) and designated duty engineers:** The Coast Guard has discussed in this rulemaking's preamble the applicability of the three levels of designated duty engineer and the three levels of engineer (limited) licenses established by the interim final rule. While the general qualifications for these licenses are specified in Part 10, their authority to satisfy manning requirements are specified in detail in Part 15.

**27. Concerns expressed by members of the Sportfishing Association of California:** Many comments were received from this Association regarding the master/mate concept for vessels of under 200 gross tons. Particular issues noted in their correspondence were:

(a) The conversion of the ocean operator license to a master or mate license—Many perceived that there are examination requirements and/or additional service and training requirements necessary to convert their licenses to those in the new system. This notion is incorrect, as ocean operators will convert their license to master (with appropriate tonnage limitations) upon near coastal waters, in fact extending the route from the current 100 mile limit to a 200 mile limit offshore without meeting additional requirements. In order to increase the license tonnage limit, or to extend the route to any ocean waters, additional examination, training or service may be required.

(b) Implementation of a master/mate concept in lieu of ocean operator/operator on waters other than ocean or coastwise—Opposition was expressed to changing the license titles, and there was concern about any loss of present authority under the operator license. As discussed in other areas of the preamble, there will not be any loss of authority for current license holders in converting to the new system. There would not be any aggregate change in the number of personnel required to man

any vessel. In fact, some presently required ocean operators may be replaced by mates in the new system, for vessels which have lengthy routes of operation. This structure will allow more personnel flexibility and will provide a training and developmental step for crew members.

(c) Requirement for examination on celestial navigation—Individuals have perceived that masters and mates with the near coastal route restriction must be examined in celestial navigation topic areas. This is also incorrect. As in existing regulations, the celestial navigation exam questions are only required for licenses with ocean routes.

**28. Master and mate licenses for service on vessels of 200 gross tons or less:** Except as noted below, master and mate licenses in the 0 to 200 gross ton range will be issued in 50 ton increments. The tonnage of the vessel upon which at least twenty-five percent of the qualifying service is obtained will be rounded up to the next larger increment. When all the qualifying service is obtained on vessels of not more than 5 gross tons, the license will be limited to not more than 25 gross tons. Licenses as master of not more than 100 gross tons may be obtained with an examination not covering questions on regulatory subchapters appropriate for vessels greater than 100 gross tons, which would be required for a master of not more than 200 gross tons. A limited examination is provided for those individuals wishing to increase the tonnage limitation of their license into the 100 to 200 gross ton range. The new offshore master and mate licenses will be endorsed for "near coastal" routes, defined as 200 miles offshore. There are additional requirements for a license endorsed with an ocean route: as in the supplemental notice, an applicant for the master, oceans license must also obtain qualification as an able seaman, must complete a radar observer course and must complete firefighting training in addition to the supplemental examination topics. In response to comments, the interim final rule contains provisions recognizing able seaman-offshore supply vessels as meeting the able seaman requirement for ocean licenses of 500 gross tons or less.

**29. Service time requirements for operator of uninspected passenger vessels:** Comments regarding the service time requirements for this license (ex-motorboat operator) suggested the higher level of experience as exists in current regulations should be retained. Previous drafts of the rulemaking had suggested six months of service for the



inland license. The Coast Guard agrees with the comments. The interim final rule requires 12 months of experience to qualify for the license as operator of uninspected passenger vessels on either inland or near coastal waters.

30. *Route restrictions for operator of uninspected passenger vessels (OUPV):* The interim final rule limits the near coastal route for the OUPV license to not more than 100 miles offshore. This is consistent with current policy and is justifiable as this license only requires one year of service. This route should not contain any additional geographic restrictions unless the acquired experience was very limited in scope. Applicants will continue to have the opportunity to cross over to the master/mate 200 gross ton category to expand their tonnage and route limitations.

31. *Routes for uninspected towing vessel licenses:* Many comments to the docket requested that the Coast Guard add another route for operator and second class operator of uninspected towing vessels that would allow such license holders to serve on vessels operating between the continental United States, Hawaii, Alaska and U.S. territories. While an ocean (unlimited) route for towboat operators could not be issued because of STCW conflict, an oceans (domestic trade) route has been added. This route will allow ocean service beyond 200 miles in domestic trade. This route endorsement will require additional examination topics and qualifications for the operator including radar observer certification, firefighting training, and qualification as able seaman (unlimited, limited, or special). The examination requirement for an oceans (domestic trade) endorsement will also include the typical celestial navigation topics found on the current operator license exam.

32. *Two watch system for uninspected towing vessels:* Many comments expressed a concern about the requirement for a three watch system if masters or mates are substituted for the licensed operator on uninspected towing vessels of less than 200 gross tons. In many cases, the master or mate license would be needed for ocean service to comply with STCW requirements in the foreign trade; however, a master or mate license may also be substituted for the uninspected towing vessel operator within the route restrictions of the license. The Coast Guard agrees that it is inappropriate to require a three watch system simply because masters and mates are substituted for licensed operators. For this reason, the Coast Guard considers that, for masters or mates substituted for uninspected

towing vessel operators, the provisions of 46 U.S.C. 8104(h) allowing a two watch system on uninspected towing vessels is still applicable.

33. *Watchstanding requirements:* The watchstanding requirements of 46 U.S.C. 8104 have been further clarified in the manning regulations, 46 CFR 15.705. That clarification includes the applicability of the two watch and three watch systems on vessels engaged on voyages of less than 600 miles and the general impact of a 12 hour workday during a consecutive 24 hour period.

34. *Offshore supply vessel and mineral and oil industry license holders:* Many comments stated that those who obtained the offshore supply vessel (OSV) and the mineral and oil industry licenses by virtue of the open-book exercise through the temporary licensing program should retain that distinction and not be automatically given a non-trade restricted license. The Coast Guard agrees with those comments. Those personnel who initially obtained the OSV licenses, then met the full service requirement, and took the full examinations to obtain the mineral and oil industry license with the 300 or 500 ton limitation may convert to the 500 ton license in the new system. Those who did not take the full exam, and/or did not meet the full service requirements through the temporary licensing program will retain the OSV limitation on their license.

35. *Service credit obtained aboard Integrated Tug-Barges (ITB):* The Coast Guard, in response to many comments, is granting service credit for original or raise of grade of unlimited deck licenses for service obtained on dual-mode ITBs. It has been Coast Guard policy to accept service on push-mode ITBs in the past; however, we are expanding the creditable service concept because, in this rulemaking, the Coast Guard is accepting service on vessels of less than 1600 gross tons toward unlimited licenses. The regulations provide that service on a dual-mode ITB with an aggregate tonnage of over 1600 gross tons is creditable on a two-for-one basis for up to 50 percent of the service required on vessels over 1600 gross tons for an original or raise of grade of an unlimited license.

36. *Conversion of master/mate licenses for uninspected vessels of any gross tons:* Comments received on this item expressed a broad range of solutions, from support of the 1600 gross ton limit, to endorsement for any gross tons. Upon consideration of the comments, it continues to be the Coast Guard position that the master of uninspected vessels license, which is

obtained with four years of total service, closely aligns with the master, 1600 gross ton, ocean license in the new system. Therefore, unless the applicant can present evidence of a higher tonnage necessity and evidence of such service, the master or mate uninspected vessel license will convert to an equivalent grade 1600 gross tons, oceans license. In any case, progression to the unlimited category will require advancement through the conventional scheme.

37. *Coast Guard manning authority on uninspected vessels:* Many comments to the docket expressed the concern that the OCMI was being given authority to set manning levels on uninspected vessels. The Coast Guard agrees that there is no authority to enforce manning levels on these vessels that exceed statutory requirements. The regulations have been reworded to clarify this issue.

38. *License authority:* In the changes to the manning regulations, a section has been added (Part 15, Subpart C) which clarifies the limitations and authorized service of licenses and documents, and the fact that personnel may serve only within those limitations. It has further been emphasized that licensed personnel must acquaint themselves with the characteristics of the vessel prior to assuming any duties.

Another section (46 CFR 15.610) has been added to the manning regulations discussing the exclusion from licensing requirements for personnel serving on towing vessels engaged in the offshore mineral and oil industry. "Offshore" in this context is intended to mean beyond the coastline. The exclusion is provided if the vessel has offshore mineral and oil industry sites or equipment as its ultimate destination or place of departure.

39. *Minimum age to act as pilot:* To serve as pilot the licensed individual must be 21, whether that individual be a master, mate, or operator or second-class operator of uninspected towing vessels.

40. *Manning requirements for pilots:* The manning provisions concerning pilots in 46 CFR 157.20-40 had not originally been included in this rulemaking because it was already the subject of a separate rulemaking (CGD 77-084) which was published as a final rule on June 24, 1985 (50 FR 26106) and subsequently modified on December 23, 1985 (50 FR 52329) and March 31, 1986 (51 FR 10837). As this interim final rule contains a general revision and reorganization of the manning Subchapter, that section is republished in this rulemaking as 46 CFR 15.812 so that all the provisions will appear in this



one document. Also, it was necessary to correct cross references to the former provisions of 46 CFR Part 10 to refer to their counterparts in this interim final rule. The radar observer provisions appear in 46 CFR 15.815(b). One substantive change has been made. The existing 46 CFR 157.20-40(d) provides that certain license holders may serve as pilot of certain vessels "of not more than 1000 gross tons." The tonnage limit has been changed to "not over 1600 gross tons." This change, among others, was the subject of a notice of proposed rulemaking (CGD 84-060) published on June 24, 1985 (50 FR 26117). All comments received concerning the proposed increase to 1600 gross tons were favorable. The change has been included in this rule because it is needed for consistency with the new licensing structure. Additionally, two matters which were contained in the Notice of Proposed Rulemaking (CGD 84-060) of June 24, 1985 (50 FR 26117), have been included in this interim final rule.

The practice of requiring pilots on certain vessels operating on the Great Lakes has also been recodified in the interim final rule. The Coast Guard originally required a pilot on vessels operating on the Great Lakes under the authority of the old 46 U.S.C. 404 which was amended by Public Law 96-378 to replace the word "pilot" with "deck officer". The Coast Guard is authorized

under 46 U.S.C. 8101 to determine the complement of licensed individuals, including pilots, considered necessary for a vessel's safe operation. The Coast Guard has continued requiring pilots on inspected mechanically propelled vessels and tank barges inspected under 46 U.S.C. Chapter 37 operating on the Great Lakes under this authority. Recodification of the practice under this authority was proposed in the Notice of Proposed Rulemaking CGD 84-060 of June 24, 1985 (50 FR 26117). Since there were no adverse comments on this issue it has been included in this rulemaking rather than being held with the remaining unresolved issues in that notice of proposed rulemaking. All the comments received regarding this issue supported this practice.

**41. Maintenanceperson:** The vast majority of comments received on this issue recommended that the Coast Guard delete the rating of maintenanceperson until establishment of the qualification requirements in 46 CFR Part 12. It is expected that, when the revision to 46 CFR Part 12, Certification of Seamen, is completed, that Part will contain the maintenanceperson designation and will establish the qualification requirements.

**42. Conversion of operator uninspected towing vessels (oceans) licenses:** Coast Guard licensing statistics indicate there are 1047

individuals currently holding licenses as operator of uninspected towing vessels with oceans routes. These licenses authorize service world wide, ex., service in the North Sea. However, the operator's license currently being issued does not comply with the STCW. To resolve this disparity and avoid the rescinding of any license authority presently granted, a restricted master's license will be issued to these individuals. At the time of license renewal, or sooner where a need is demonstrated, the operator of uninspected towing vessels with an ocean route will be converted to a master of steam or motor vessels of not more than 200 gross tons (restricted to uninspected towing vessels). The restriction can only be removed by acquiring the qualifying experience and successfully completing an examination for a master's license, ex., master of not more than 200 or master of not more than 500 gross tons.

**43. Physical examinations:** The Coast Guard is giving consideration to varying the required frequency of physical examinations, with the frequency being determined by the age of the mariner. Older mariners would likely be required to have a physical more often than their younger counterparts. Comments on the appropriateness of such a practice and suggestions on implementation methods are solicited.

#### COMPLETE LIST OF NEW AND RETAINED LICENSES AND THOSE CORRESPONDING LICENSES

Licenses in new structure	Eliminated corresponding licenses
<b>I. Deck Licenses</b>	
<b>A. Ocean or Near Coastal Service:</b>	
1. Master ocean steam or motor vessels of any gross tons (retained).....	a. Master coastwise any gross tons.
2. Master near coastal steam or motor vessels of any gross tons (new).....	b. Master ocean freight or towing steam or motor vessels of not more than 3,000 gross tons—new license would have tonnage limit.
3. Chief mate ocean steam or motor vessels of any gross tons (retained).....	a. Chief mate coastwise any gross tons.
4. Chief mate near coastal steam or motor vessels of any gross tons (new).....	b. Chief mate ocean freight and towing vessels of not more than 3,000 gross tons—new license would have tonnage limit.
5. Second mate ocean steam or motor vessels of any gross tons (retained).....	a. Second mate coastwise any gross tons.
6. Second mate near coastal steam or motor vessels of any gross tons (new).....	
7. Third mate ocean steam or motor vessels of any gross tons (retained).....	a. Third mate coastwise any gross tons.
8. Third mate near coastal steam or motor vessels of any gross tons (new).....	a. Master coastwise (if limited tonnage).
9. Master ocean or near coastal steam or motor vessels of not more than 1,600 gross tons (new).....	b. Master uninspected vessels.
	c. Master freight and towing vessels (other than inland) of not more than 1,000 gross tons.
	d. Master coastwise towing vessels of not more than 750 gross tons.
	e. Master steam or motor towing vessels upon oceans.
10. Mate ocean or near coastal steam or motor vessels of not more than 1,600 gross tons (new).....	a. Mate uninspected vessels.
	b. Mate freight and towing vessels (other than inland) of not more than 1,000 gross tons.
	c. Chief mate ocean or coastwise towing vessels of not more than 750 gross tons.
11. Master ocean or near coastal steam or motor vessels of not more than 500 gross tons (new).....	a. Master freight and towing vessels of not more than 500 gross tons.
	b. Master mineral and oil industry vessels of not more than 500 gross tons.
	c. Master passenger vessels of not more than 300 gross tons.
	d. Master yachts.
	e. Master pilot boats of not more than 300 gross tons.
12. Mate ocean or near coastal steam or motor vessels of not more than 500 gross tons (new).....	a. Mate mineral and oil industry vessels of not more than 500 gross tons.
13. Master ocean or near coastal steam or motor vessels of not more than 200 gross tons (new).....	b. Mate pilot boats of not more than 300 gross tons.
14. Mate near Coastal steam or motor vessels of not more than 200 gross tons (new).....	a. Ocean operator-convertible with additional examination and required experience.
15. Master near coastal steam or motor vessels of not more than 100 gross tons (new).....	
16. Offshore installation manager (new) [reserved].....	a. Ocean operator-convertible without additional examination.
17. Barge supervisor (new) [reserved].....	
18. Ballast control operator (new) [reserved].....	



## COMPLETE LIST OF NEW AND RETAINED LICENSES AND THOSE CORRESPONDING LICENSES—Continued

Licenses in new structure	Eliminated corresponding licenses
19. Master uninspected fishing industry vessels (retained).....	
20. Mate uninspected fishing industry vessels (retained).....	
21. Operator of uninspected towing vessels, oceans (domestic trade) (retained).....	
22. Operator of uninspected towing vessels, near coastal (retained).....	
23. Second-class operator of uninspected towing vessels, oceans (domestic trade) (retained).....	
24. Second-class operator of uninspected towing vessels, near coastal (retained).....	
25. Operator of uninspected passenger vessels upon near coastal routes (new-ex-MBO).....	
B. Great Lakes and Inland Service:	
1. Master Great Lakes and inland steam or motor vessels of any gross tons (new).....	a. Master Great Lakes.
2. Master inland steam or motor vessels of any gross tons (new).....	a. Master, lakes, bays and sounds steam or motor vessels. b. Master ferry vessels. c. Master rivers. d. Master or pilot of steam yachts (if unlimited tonnage). e. Master passenger barges (if unlimited tonnage).
3. Mate Great Lakes and inland steam or motor vessels of any gross tons (new).....	a. Mate Great Lakes. b. Mate ferry vessels. c. Inland mate (non-navigating) —service will count as boatswain toward a deck license.
4. Master Great Lakes and inland steam or motor vessels of not more than 1,600 gross tons (new).....	a. Master freight and towing vessels of not more than 1,000 gross tons on inland routes. b. Master or pilot of steam pilot boats on inland routes. c. Master steam yachts on inland routes. d. Master passenger barges upon inland routes—converted license limited to non-self propelled vessels.
5. Mate Great Lakes and inland steam or motor vessels of not more than 1,600 gross tons (new).....	a. Mate freight and towing vessels of not more than 1,000 gross tons on inland routes. b. Mate or pilot of steam pilot boats on inland routes.
6. Master Great Lakes and inland steam or motor vessels of not more than 200 gross tons (new).....	a. Operator, waters other than ocean or coastwise (same propulsion modes) —convertible with additional examination.
7. Mate Great Lakes and inland steam or motor vessels of not more than 200 gross tons (new).....	
8. Master inland steam or motor vessels of not more than 100 gross tons (new).....	a. Operator, waters other than ocean or coastwise (same propulsion modes)—convertible without additional examination.
9. Limited master of Great Lakes and inland steam or motor vessels of not more than 100 gross tons (new).....	
10. First Class Pilot (retained).....	
11. Operator uninspected towing vessels Great Lakes and inland (new).....	a. Operator uninspected towing vessels inland.
12. Second class operator uninspected towing vessels Great Lakes and inland (new).....	a. Second class operator uninspected towing vessels inland.
13. Operator uninspected towing vessels upon western rivers (retained).....	
14. Second class operator uninspected towing vessels upon western rivers (retained).....	
15. Operator uninspected passenger vessels upon inland waters (retained—ex MBO).....	
<b>II. Engineer Licenses</b>	
1. Chief engineer steam and/or motor vessels unlimited (retained).....	
2. First assistant engineer steam and/or motor vessels unlimited (retained).....	
3. Second assistant engineer steam and/or motor vessels unlimited (retained).....	
4. Third assistant engineer steam and/or motor vessels unlimited (retained).....	
5. Chief engineer (limited-oceans) (new).....	a. Chief engineer uninspected motor vessels. b. Chief engineer motor towing vessels. c. Chief engineer mineral and oil industry vessels (with five years engineroom service).
6. Chief engineer (limited-near coastal) (new).....	a. Chief engineer motor ferry vessels. b. Chief engineer mineral and oil industry vessels (with four years engineroom service).
7. Assistant engineer (limited) (new).....	a. Assistant engineer uninspected motor vessels. b. Assistant engineer motor ferry vessels. c. Assistant engineer motor towing vessels.
8. Designated duty engineer (new) Horsepower will be limited by years of experience when converting assistant engineer licenses.	a. Chief engineer mineral and oil industry vessels. b. Assistant engineer mineral and oil industry vessels. c. First assistant engineer motor towing or ferry vessels.
9. Chief engineer uninspected fishing industry vessels (retained).....	
10. Assistant engineer uninspected fishing industry vessels (retained).....	
<b>III. Other Licenses/Certificates</b>	
A. Radio officer (retained)	
B. Certificates of registry as staff officer (retained):	
1. Chief purser	
2. Purser	
3. Senior assistant purser	
4. Junior assistant purser	
5. Medical doctor	
6. Professional nurse	
7. Endorsements on certificates of registry:	
a. Marine physician assistant	
b. Hospital corpsman	

## Regulatory Evaluation

These regulations are considered to be non-major under Executive Order 12291 and significant under the DOT regulatory policies and procedures (44 FR 11034; February 26, 1979). A full regulatory evaluation has been prepared and placed in the rulemaking docket. It

may be inspected or copied at the Marine Safety Council (G-CMC/21) [CGD 81-059] Room 2110, U.S. Coast Guard Headquarters, 2100 Second Street, S.W., Washington, D.C. 20593-0001 from 8 a.m. to 3 p.m. Copies may also be obtained by referring to the "For Further Information Contact" paragraph.

The regulations serve to implement legislative changes and simplify nearly all aspects of the merchant marine personnel licensing and manning systems. Implementation would not increase manning requirements upon the vessels concerned nor place any significant additional burden upon the



private or public sectors. There would be an increase in training requirements regarding firefighting for certain deck and engineer officers and for periodic recertification of cardiopulmonary resuscitation (CPR) training. For this analysis, required training costs are expressed in 1986 dollars. Damage costs have been averaged without any adjustments being made to each year's dollar value.

Training in first aid and CPR is made a basic qualification requirement for all licenses. This is not a new or additional requirement for the original issuance of most licenses and will have been met by all current holders of masters, mates, pilots or engineer licenses. In addition, most companies already require first aid/CPR training of their personnel, thus tending to minimize the economic impact of the proposal.

Cardiopulmonary resuscitation recertification courses will be required prior to license renewal. First aid recertification is not required for renewal.

The requirement for training in first aid and CPR may be satisfied in a variety of ways with varying costs. Acceptable first aid courses administered by the American Red Cross range from one to three days and cost between \$5 and \$50. Original CPR qualification and recertification by the American Red Cross or American Heart Association takes no more than one day at a cost of \$5. In addition, many license preparatory schools have incorporated first aid and CPR training by certified instructors into their course curricula. The additional annual cost will be equal to the cost of the training multiplied by the number of individuals not presently required to obtain that training. The licenses effected are those of uninspected towing vessels and small passenger vessels. The number of individuals used is a five year average.

a. Cost of first aid training for original license issuance is  $6,898 \times \$50 = \$344,900$ . The \$50 figure used is considered the maximum likely charge.

b. Cost of CPR training for original license issuance is  $6,898 \times \$5 = \$34,490$ .

c. Cost of CPR training for license renewal is  $6,580 \times \$5 = \$32,900$ .

d. Total additional annual cost for first aid and CPR training is \$412,290.

The firefighting training requirements will provide an assured minimum level of knowledge to those most likely to provide initial response to shipboard fires. Increased awareness of fire hazards and techniques for combating fires will work to reduce the number of fires and their severity. In recognition of the increased safety benefits, many portions of the marine industry already

require similar forms of firefighting training.

The financial benefits of firefighting training are significant but not easily quantifiable. There are no known authoritative estimates as to potential dollar savings likely to result from mariners receiving this training. For this analysis a conservative ten percent reduction in fire damage is assumed. For the five year period, 1981 to 1985, there was a reported \$274 million damage to vessels which would carry firefighting trained officers. A ten percent reduction would amount to a \$5.5 million annual savings. This figure does not include a reduction of deaths (22 in 1984), injuries (38 in 1984), or related pollution to the environment.

The approximate cost of the firefighting training requirement is obtained in the following manner:

(a) Estimate the number of all active licensed mariners who will be affected by the training requirement;

(b) Subtract the number of officers who have completed the firefighting training (after discounting a percentage who may not be actually sailing on their licenses). We must also subtract a percentage who may have been trained as unlicensed personnel;

(c) Multiply this total by the sum of the average cost per course (basic and advanced) and the travel/per diem costs;

(d) Further, we must estimate the number of new licensed personnel each year (total new licenses issued) who must comply with the training requirement and have not been trained already as part of their usual training in order to calculate the recurring costs; and,

(e) Multiply this total by course costs and travel/per diem charges.

Summarizing the facts in the analysis, the totals are:

(a) The total number of all active licensed mariners affected is 25,989;

(b) The approximate total of previously trained officers is 9,656;

(c) The cost per course ranges between \$100 and \$400, with an average of \$150. Travel costs average \$250 per person; per diem is \$85 per day for a 4-6 day course. Therefore, the start up cost for firefighting training is \$13,474,725.

(d) For the recurring costs, the number of new licensed personnel each year (from CG license statistics) who would be affected by the firefighting training requirement is 2,920. From this total, we subtract those persons at state and federal maritime academies who already obtain the training as part of their basic training (998 per year), those engineer students from union schools which require the training (100 per year),

and those progressing from unlicensed ratings (approx. 102). Therefore, the total number of new officers each year requiring the training is estimated to be 1720 and recurring costs are estimated to be \$1,419,000 per year.

The other significant benefits of this interim final rule are to simplify the licensing regulations, simplify the procedures involved in obtaining a license, and to enhance opportunities for careers in the merchant marine by providing a license progression for all mariners. The number of types of licenses issued will be decreased in the regulations from approximately 100 to 45. This decrease will result in substantial time and associated cost savings to the public as, in the interim final rule, one license may replace two or more trade restricted or specialized licenses. Additional savings to the public will result by decreasing the number of license examinations from approximately 78 to 29. These exams required between four hours and four days to complete.

The agency certifies that this interim final rule will not have a significant economic impact on a substantial number of small entities. These final rules apply to licenses for individuals only. The residual effect on training schools may be a minor modification in some course structures to reflect exam topics for licenses; course title changes to reflect new license titles; and, possibly some course combining to account for the deletion of some trade restricted licenses.

This interim final rule contains no new information collection requirements. The information collection requirements that it does contain have been submitted to the Office of Management and Budget for review under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*) and have been approved by OMB. The section numbers and the corresponding OMB approval numbers are listed in section 10.107.

#### List of Subjects

##### 46 CFR Part 1

Administrative practice and procedure, Organization and functions (government agencies).

##### 46 CFR Part 10

Seamen, Marine Safety, Navigation (water), Passenger vessels.

##### 46 CFR Part 15

Seamen, Vessels.



**46 CFR Part 35**

Barges, Tank vessels, Marine safety, Navigation (water), Reporting and recordkeeping requirements.

**46 CFR Part 157**

Seamen, Vessels.

**46 CFR Part 175**

Marine safety, Passenger vessels.

**46 CFR Part 185**

Marine safety, Navigation (water), Passenger vessels, Reporting and recordkeeping requirements.

**46 CFR Part 186**

Marine safety, Passenger vessels, Seamen.

**46 CFR Part 187**

Marine safety, Passenger vessels, Seamen.

**Interim Final Rules**

In consideration of the foregoing, the Coast Guard is amending Parts 1, 10, 35, 157, 175, 185, 186, and 187 of Title 46, Code of Federal Regulations as set forth below:

**PART 1—ORGANIZATION, GENERAL COURSE AND METHODS GOVERNING MARINE SAFETY FUNCTIONS [AMENDED]**

1. The authority citation for Part 1 continues to read as follows:

Authority: 5 U.S.C. 552; 14 U.S.C. 633; 49 CFR 1.45, 1.46; § 1.30 also issued under the authority of 44 U.S.C. 3507.

2. Section 1.05 is amended by revising the list in the note following paragraph (b) to read as follows:

**§ 1.05 Organization; districts**

\* \* \* \* \*

(b) \* \* \*

Note: \* \* \*

Boston, MA	Toledo, OH
New York, NY	Long Beach, CA
Baltimore, MD	San Francisco, CA
Charleston, SC	Portland, OR
Miami, FL	Seattle, WA
New Orleans, LA	Anchorage, AK
Houston, TX	Juneau, AK
Memphis, TN	Honolulu, HI
St. Louis, MO	

\* \* \* \* \*

3. Part 10 is revised to read as follows:

**SUBCHAPTER B—MERCHANT MARINE OFFICERS AND SEAMEN**

**PART 10—LICENSING OF MARITIME PERSONNEL**

**Subpart A—General**

Sec.

- 10.101 Purpose of regulations.
- 10.103 Definitions of terms used in this part.

Sec.

- 10.105 Regional examination centers.
- 10.107 Paperwork approval.

**Subpart B—General Requirements for all Licenses and Certificates of Registry**

Sec.

- 10.201 Eligibility for licenses, general.
- 10.202 Issuance of licenses.
- 10.203 Quick reference table for license requirements.
- 10.204 Appeals.
- 10.205 Requirements for original licenses and certificates of registry.
- 10.207 Requirements for raise of grade of license.
- 10.209 Requirements for renewal of license.
- 10.211 Creditable service and equivalents for licensing purposes.
- 10.213 Sea service as a member of the Armed Forces of the United States and on vessels owned by the United States as qualifying experience.
- 10.215 Modification or removal of limitations.
- 10.217 Examination procedures and denial of licenses.
- 10.219 Issuance of duplicate license.
- 10.221 Parting with license.
- 10.223 Suspension and revocation of licenses.

**Subpart C—Training Schools With Approved Courses**

Sec.

- 10.301 Applicability.
- 10.302 Course approval.
- 10.303 General standards.
- 10.304 Substitution of training for required service.
- 10.305 Radar observer qualifying courses.
- 10.307 Training schools with approved radar observer courses.

**Subpart D—Professional Requirements for Deck Officers' Licenses**

Sec.

- 10.401 Ocean and near coastal licenses.
- 10.402 Tonnage requirements for ocean or near coastal licenses for vessels of over 1600 gross tons.
- 10.403 Deck license structure.
- 10.404 Service requirements for master of ocean or near coastal steam or motor vessels of any gross tons.
- 10.405 Service requirements for chief mate of ocean or near coastal steam or motor vessels of any gross tons.
- 10.406 Service requirements for second mate of ocean or near coastal steam or motor vessels of any gross tons.
- 10.407 Service requirements for third mate of ocean or near coastal steam or motor vessels of any gross tons.
- 10.410 Tonnage requirements for ocean and near coastal licenses for vessels of not more than 1600 gross tons.
- 10.412 Service requirements for master of ocean or near coastal steam or motor vessels of not more than 1600 gross tons.
- 10.414 Service requirements for mate of ocean steam or motor vessels of not more than 1600 gross tons.

Sec.

- 10.416 Service requirements for mate of near coastal steam or motor vessels of not more than 1600 gross tons.
- 10.418 Service requirements for master of ocean or near coastal steam or motor vessels of not more than 500 gross tons.
- 10.420 Service requirements for mate of ocean or near coastal steam or motor vessels of not more than 500 gross tons.
- 10.422 Tonnage limitations and qualifying requirements for licenses as master or mate of vessels of not more than 200 gross tons.
- 10.424 Service requirements for master of ocean steam or motor vessels of not more than 200 gross tons.
- 10.426 Service requirements for master of near coastal steam or motor vessels of not more than 200 gross tons.
- 10.428 Service requirements for mate of near coastal steam or motor vessels of not more than 200 gross tons.
- 10.429 Service requirements for master of near coastal steam or motor vessels of not more than 100 gross tons.
- 10.430 Licenses for the Great Lakes and inland waters.
- 10.431 Tonnage requirements for Great Lakes and inland licenses for vessels of over 1600 gross tons.
- 10.433 Service requirements for master of Great Lakes and inland steam or motor vessels of any gross tons.
- 10.435 Service requirements for master of inland steam or motor vessels of any gross tons.
- 10.437 Service requirements for mate of Great Lakes and inland steam or motor vessels of any gross tons.
- 10.440 Tonnage limitations and service requirements for licenses as master or mate of Great Lakes and inland vessels of not more than 1600 gross tons.
- 10.442 Service requirements for master of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons.
- 10.444 Service requirements for mate of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons.
- 10.450 Tonnage limitations and qualifying requirements for licenses as master or mate of Great Lakes and inland vessels of not more than 200 gross tons.
- 10.452 Service requirements for master of Great Lakes and inland steam or motor vessels of not more than 200 gross tons.
- 10.454 Service requirements for mate of Great Lakes and inland steam or motor vessels of not more than 200 gross tons.
- 10.455 Service requirements for limited master of Great Lakes and inland steam or motor vessels of not more than 100 gross tons.
- 10.456 Service requirements for master of inland steam or motor vessels of not more than 100 gross tons.
- 10.460 Special deck license structure.
- 10.462 Licenses for master or mate of uninspected fishing industry vessels.
- 10.464 Licenses for operator of uninspected towing vessels.
- 10.466 Licenses for operator of uninspected passenger vessels.



## Sec.

- 10.468 Licenses for mobile offshore drilling units [Reserved].
- 10.470 Mobile offshore drilling unit (MODU) license structure [Reserved].
- 10.480 Radar observer.

**Subpart E—Professional Requirements for Engineer Officers' Licenses**

## Sec.

- 10.501 Grade and type of engineer licenses issued.
- 10.502 Additional requirements for engineer licenses.
- 10.503 Horsepower limitations.
- 10.504 Engineer license structure.
- 10.510 Service requirements for chief engineer of steam and/or motor vessels.
- 10.512 Service requirements for first assistant engineer of steam and/or motor vessels.
- 10.514 Service requirements for second assistant engineer of steam and/or motor vessels.
- 10.516 Service requirements for third assistant engineer of steam and/or motor vessels.
- 10.518 Service requirements for chief engineer (limited-oceans) of steam and/or motor vessels.
- 10.520 Service requirements for chief engineer (limited-near coastal) of steam and/or motor vessels.
- 10.522 Service requirements for assistant engineer (limited-oceans) of steam and/or motor vessels.
- 10.524 Service requirements for designated duty engineer of steam and/or motor vessels.
- 10.530 Licenses for engineers of uninspected fishing industry vessels.
- 10.540 Licenses for mobile offshore drilling units (MODUs) [Reserved].

**Subpart F—Licensing of Radio Officers**

## Sec.

- 10.601 Applicability.
- 10.603 Requirements for radio officer licenses.

**Subpart G—Professional Requirements for Pilot Licenses [Reserved]****Subpart H—Registration of Staff Officers**

## Sec.

- 10.801 Applicability.
- 10.803 Grades of certificates issued.
- 10.805 General requirements.
- 10.807 Experience requirements for registry.
- 10.809 Experience requirements for ratings endorsed on certificate of registry.

**Subpart I—License Examination Subjects**

## Sec.

- 10.901 General provisions.
- 10.903 Licenses requiring examinations.
- 10.905 Examination reference information.
- 10.910 Subjects for deck licenses.
- 10.920 Subjects for mobile offshore drilling unit (MODU) licenses. [Reserved].
- 10.950 Subjects for engineer licenses.

Authority: 46 U.S.C. 2103, 7101; 43 U.S.C. 1333(d); 49 CFR 1.46 (b) and (z).

**Subpart A—General****§ 10.101 Purpose of regulations.**

(a) The purpose of the regulations in this Part is to provide a comprehensive means of determining the qualifications an applicant must possess in order to be eligible for a license as deck, engineer, pilot, or radio officer on merchant vessels, or a license to operate uninspected towing vessels or uninspected passenger vessels, or for a certificate of registry as staff officer.

(b) With few exceptions, these regulations do not specify or restrict licenses to particular types of service such as tankships, freight vessels or passenger vessels. However, all licensed personnel shall become familiar with the relevant characteristics of each vessel prior to assuming their duties. As appropriate, these characteristics include but are not limited to: general arrangement of the vessel; maneuvering characteristics; proper operation of the installed navigation equipment; firefighting and lifesaving equipment; stability and loading characteristics; emergency duties; and main propulsion and auxiliary machinery, including steering gear systems and controls.

(c) The regulations in Subpart C of this Part prescribe the requirements applicable to all approved training courses if the training course is to be acceptable as a partial substitute for service, for an examination requirement, or as training required for a particular license or license endorsement.

**§ 10.103 Definitions of terms used in this part.**

"Assistant engineer" means a qualified officer in the engine department.

"Boatswain" means the leading seaman and immediate supervisor of unlicensed deck personnel who supervises the maintenance of deck gear.

"Chief engineer" means any person responsible for the mechanical propulsion of a vessel and who is the holder of a valid license as chief engineer.

"Chief mate" means the deck officer next in seniority to the master and upon whom the command of the vessel will fall in the event of the incapacity of the master.

"Day" means, for the purpose of complying with the service requirements of this Part, eight hours of watchstanding or day-working not to include overtime. On vessels where a 12 hour working day is authorized and practiced, such as on a six-on, six-off watch schedule, each work day may be creditable as one and one half days of

service. On vessels of less than 100 gross tons, a day is considered as eight hours unless the Officer in Charge, Marine Inspection determines that the vessel's operating schedule makes this criteria inappropriate, in no case will this period be less than four hours.

"Designated duty engineer" means a qualified engineer, who may be the sole engineer on vessels with a periodically unattended engine room.

"Endorsement" means a provision added to a license which alters its scope or application. An example of an endorsement is a tonnage limitation increase within a general tonnage category, a pilot license route addition, or a radar observer qualification.

"First assistant engineer" means the engineer officer next in seniority to the chief engineer and upon whom the responsibility for the mechanical propulsion of the vessel will fall in the event of the incapacity of the chief engineer.

"Great Lakes" means the Great Lakes and their connecting and tributary waters including the Calumet River as far as the Thomas J. O'Brien Lock and Controlling Works (between mile 326 and 327), the Chicago River as far as the east side of the Ashland Avenue Bridge (between mile 321 and 322), and the Saint Lawrence River as far east as the lower exit of Saint Lambert Lock.

"Horsepower" means, for the purpose of this Part, the total maximum continuous shaft horsepower of all the vessel's main propulsion machinery.

"Inland waters" means the navigable waters of the United States shoreward of the Boundary Lines as described in 46 CFR Part 7, excluding the Great Lakes.

"Master" means the officer having command of a vessel.

"Mate" means a qualified officer in the deck department other than the master.

"Month" means 30 days, for the purpose of complying with the service requirements of this Part.

"Near coastal" means ocean waters not more than 200 miles offshore.

"Oceans" means the waters seaward of the Boundary Lines as described in 46 CFR Part 7.

"Officer in Charge, Marine Inspection (OCMI) for the purposes of Part 10 means the officer or individual so designated at one of the locations of the regional examination centers listed in § 10.105.

"Operator" means an individual licensed to operate certain uninspected vessels.

"Orally assisted examination" means a license examination as described in Subpart I of this Part verbally



administered and documented by an examiner.

"Original license" means the first deck, engineer or radio officer license issued to any person by the Coast Guard.

"Raise of grade" means an increase in the level of authority and responsibility associated with a license.

"Undocumented vessel" means a vessel not required to have a document issued under the laws of the United States.

"Western Rivers" means the Mississippi River, its tributaries, South Pass, and Southwest Pass, to the navigational demarcation lines dividing the high seas from harbors, rivers, and other inland waters of the United States, and the Port Allen-Morgan City Alternate Route, and that part of the Atchafalaya River above its junction with the Port Allen-Morgan City Alternate Route including the Old River and the Red River, and those waters specified in 33 CFR 89.25.

"Year" means 360 days, for the purpose of complying with the service requirements of this part.

#### § 10.105 Regional examination centers.

Licensing and certification functions are performed only by the Officer in Charge, Marine Inspection, at the following locations:

Boston, MA	Toledo, OH
New York, NY	Long Beach, CA
Baltimore, MD	San Francisco, CA
Charleston, SC	Portland, OR
Miami, FL	Seattle, WA
New Orleans, LA	Anchorage, AK
Houston, TX	Juneau, AK
Memphis, TN	Honolulu, HI
St. Louis, MO	

#### § 10.107 Paperwork approval.

(a) This section lists the control numbers assigned by the Office of Management and Budget under the Paperwork Reduction Act of 1980 (Pub. L. 96-511) for the reporting and record keeping requirements in this part.

(b) The following control numbers have been assigned to the sections indicated:

- (1) OMB 2115-0006—46 CFR 10.201, 10.202, 10.205, 10.207, 10.209.
- (2) OMB 2115-0501—46 CFR 10.205.
- (3) OMB 2115-0502—46 CFR 10.205.
- (4) OMB 2115-0514—46 CFR 10.201, 10.202, 10.205, 10.207, 10.209.
- (5) OMB 2115-0111—46 CFR 10.302, 10.303, 10.304, 10.480.

### Subpart B—General Requirements for All Licenses and Certificates of Registry

#### § 10.201 Eligibility for licenses, general.

(a) The applicant must establish to the satisfaction of the Officer in Charge,

Marine Inspection, that he or she possesses all of the qualifications necessary, e.g., age, experience, character references and recommendations, physical examination, citizenship, and training, and pass a professional examination, as appropriate, before a license is issued.

(b) No person is eligible for a license who has been convicted by a court of record of a violation of the dangerous drug laws of the United States, the District of Columbia, or any state or territory of the United States, within three years prior to the date of filing the application (this period may be extended up to ten years after conviction, if the gravity of the facts or circumstances of the case warrant) or who, unless he or she furnishes satisfactory evidence of cure, has ever been the user of or addicted to the use of a dangerous drug.

(c) An applicant for a license must demonstrate an ability to speak and understand English as found in the navigation rules, aids to navigation publications, emergency equipment instructions, machinery instructions, and radiotelephone communications instructions.

(d) An applicant for a license must meet the requirements for recent service specified in § 10.202(e).

(e) No license or certificate of registry may be issued to any person who is not a citizen of the United States with the exception of operator of uninspected passenger vessels limited to vessels not documented under the laws of the United States.

(f) Except as specified in this paragraph, no license or certificate of registry may be issued to a person who has not attained the age of 21 years.

(1) A license as master of vessels of 25–200 gross tons on near coastal, Great Lakes, or inland waters, third mate, third assistant engineer, mate of vessels of 200–1600 gross tons, assistant engineer of fishing industry vessels, second-class operator of uninspected towing vessels, radio officer, assistant engineer (limited-oceans), or designated duty engineer on vessels of not more than 4000 horsepower may be granted an applicant who has reached the age of 19 years, but no such license may be raised in grade before the holder has reached the age of 21 years.

(2) A license as mate of vessels of 0–200 gross tons upon Great Lakes and inland waters, mate of vessels of 0–200 gross tons upon near coastal waters, operator of uninspected passenger vessels, or designated duty engineer on vessels of not more than 1000 horsepower may be granted an

applicant who has reached the age of 18 years.

(g) Persons serving or intending to serve in the merchant marine service are recommended to take the earliest opportunity of ascertaining, through examination, whether their visual acuity, and color vision where required, are such as to qualify them for service in that profession. Any physical impairment or medical condition which would render an applicant incompetent to perform the ordinary duties of an officer at sea is cause for denial of a license.

#### § 10.202 Issuance of licenses.

(a) Applications for original licenses, raises of grade, extensions of route, or endorsements must be current and up-to-date with respect to service and the physical examination, as appropriate. Physical examinations and approved applications are valid for 12 months.

(b) Any person who is found qualified under the requirements set forth in this Part is issued an appropriate license valid for a term of five years, except that a certificate of registry does not expire.

(c) The license is not valid until signed by the applicant and the OCMI (or the OCMI's designated representative).

(d) Every person who receives an original license or certificate of registry shall take an oath before a designated Coast Guard official that he or she will faithfully and honestly, according to their best skill and judgment, without concealment or reservation, perform all the duties required by law and obey all lawful orders of superior officers. Such an oath remains binding for all subsequent licenses issued to that person unless specifically renounced in writing.

(e) The applicant for any original license, endorsement, or raise of grade of license must have at least three months' qualifying service on vessels of appropriate tonnage or horsepower within the three years immediately preceding the date of application. Prior to December 1, 1988, this section is not applicable when all the qualifying service was military sea service.

(f) Any applicant whose uncorrected vision exceeds 20/40 in either eye for deck licenses or 20/50 in either eye for engineer, radio officer, offshore installation manager, barge supervisor, or ballast control operator licenses may not serve under the authority of the license unless corrective lenses are worn and spare lenses are carried on board a vessel while serving. (Not applicable to staff officers).

(g) If an Officer in Charge, Marine Inspection, refuses to grant an applicant



the license for which applied, the OCMI will furnish the applicant, if requested, a written statement setting forth the cause of denial.

(h) If an Officer in Charge, Marine Inspection, modifies the service or examination requirements in this Part to

satisfy the unique qualification requirements of an applicant, the license is limited on its face to reflect this modification. Such limitations shall not be removed without the approval of the OCMI who assigned that limit.

#### § 10.203 Quick reference table for License Requirements.

Table 10.203 provides a guide to the requirements for the various licenses. Provisions in the reference sections are controlling.

License category	Minimum age	Citizenship requirement	Physical required	Experiment requirements	Recommendations and character check	Firefighting certificate	Professional exam requirements	Recency of service	First aid and CPR requirements
Masters/mates and operators of uninspected passenger vessels (original license)	21; 10.201(f); Note: exceptions.	Yes, 10.201(e); Note: exception.	Yes, 10.205(d); Note: (d)(2).	Yes, 10.205(e); Subpart D.	Yes, 10.205(f)....	Yes, 10.205(g); Note: exceptions.	Yes, 10.205(i), 10.910; Note: 10.903(b).	Yes, 3 months past 36 months, 10.202(e).	Yes, in 10.205(h).
Engineers (original license)	21; 10.201(f); Note: exceptions.	Yes	Yes, 10.205(d); Note: (d)(3).	10.205(e); Subpart E.	Yes, 10.205(f)....	Yes, 10.205(g)....	Yes, 10.205(i), 10.950.	Yes, 3 months in past 36 months, 10.202(e).	Yes, 10.205(h).
All raises of grade	21; 10.201(f); Note: exceptions.	Yes	10.207(e); Note: (e)(1).	10.207(c); Subparts D & E.	N/A	Yes, Note: 10.207(f).	10.207(d), 10.910, 10.920, 10.950.	Yes, 3 months in past 36 months, 10.202(e).	N/A
All renewals	21	Yes	10.209(d)	10.209(c)	N/A	N/A	10.209(c)	10.209(c)	Yes, CPR: 10.209(c).
Pilot	21	Yes	Yes, 10.709	10.703, 10.706(a), 10.715.	Yes, 10.205(f)....	N/A	10.707, 10.910	Yes, 10.703, 10.705(e), 10.713.	Yes, 10.205(h).
Uninspected fishing industry vessels	21; 10.201(f); Note: exceptions.	Yes	Yes, 10.205(d); Note: (d)(2) or (d)(3).	Deck: 10.462, Eng: 10.530, 10.205(f).	Yes, 10.205(f)....	Yes, 10.205(g)....	Yes, 10.205(i), 10.910, 10.950 (oral).	Yes, 3 months in past 36 months, 10.202(e).	Yes, 10.205(h).
Uninspected towing vessels	Operator: 21; 2/c operator: 19.	Yes	Yes, 10.205(d); Note: (d)(2).	10.464	Yes, 10.205(f)....	Yes, 10.205(g), oceans.	Yes, 10.205(i), 10.910.	Yes, 3 months in past 36 months, 10.202(e).	Yes, 10.205(h).
Radio officer	19	Yes	Yes, 10.205(d); Note: (d)(3).	10.603	Yes, 10.205(f)....	N/A	N/A	N/A	Yes, 10.205(h).
Staff officer	21	N/A	No	10.807	Yes, 10.205(f)....	N/A	N/A	N/A	N/A
Offshore installation manager, barge supervisor, ballast control operator.	21; 10.201(f); Note: exceptions.	Yes	Yes, 10.205(d); Note: (d)(3).	Deck: 10.468, Eng: 10.540.	Yes, 10.205(f)....	Yes, 10.205(g)....	Yes, 10.205(i), 10.920.	Yes, 3 months in past 36 months, 10.202(e).	Yes, 10.205(h).

#### § 10.204 Appeals.

(a) Any person affected by a decision or action of the Officer in Charge, Marine Inspection, may:

(1) Appeal to the District Commander in whose jurisdiction the decision or action was made; and,

(2) Appeal the decision of the District Commander to the Commandant.

(b) Each appeal must be in writing, filed within 30 days after the date of receipt of the decision or action that is being appealed, and contain:

(1) A description of the decision or action that is being appealed; and,

(2) The appellant's reason why the decision or action should be set aside or revised.

(c) Any decision being appealed remains in effect until set aside or revised.

#### § 10.205 Requirements for original licenses and certificates of registry.

(a) *General.* The applicant for an original license or certificate of registry shall present satisfactory documentary evidence of eligibility in respect to the requirements of this section. All applicants shall make written

application on a Coast Guard furnished form.

(b) *Minimum age.* The applicant shall present satisfactory proof of age as prescribed in § 10.201(f). This evidence may be any of the items submitted to establish citizenship.

(c) *Citizenship.* (1) The OCMI may reject any evidence of citizenship that is not believed to be authentic. Acceptable evidence of citizenship may be an original or certified copy of the following:

(i) Birth certificate or birth registration.

(ii) Certificate of naturalization.

(iii) Baptismal certificate or parish record recorded within one year after birth.

(iv) Statement of a practicing physician certifying attendance at the birth and who possesses a record showing the date and location at which it occurred.

(v) State Department passport.

(vi) A merchant mariner's document issued by the Coast Guard which shows the holder as a United States citizen.

(vii) Delayed certificate of birth issued under a state seal in the absence of any

collateral facts indicating fraud in its procurement.

(viii) Certificate of Citizenship issued by the United States Immigration and Naturalization Service.

(2) If none of the requirements set forth in paragraphs (c)(1)(i) through (c)(1)(viii) of this section can be met by the applicant, the individual shall make a statement to that effect, and may submit data of the following character for consideration:

(i) Report of the Census Bureau showing the earliest available record of age or birth. Request for such information should be addressed to the Personal Census Service Branch, Bureau of the Census, Pittsburgh, Kansas 66762. In making such request, the use of Form BC-600, Application for Search of Census Records, furnished by the Bureau is required.

(ii) Affidavits of parents, relative, or two or more responsible citizens of the United States stating citizenship.

(iii) School records, immigration records, or insurance policies.

(d) *Physical examination.* (1) All applicants for an original license must pass an examination given by a licensed physician or a licensed physician



assistant and present to the OCMI a completed Coast Guard physical examination form, or the equivalent, executed by the physician. This form must provide information on the applicant's acuity of vision, color sense, and general physical condition. This examination must have been completed prior to submission of the application and not more than 12 months prior to issuance of the license. (Physical examinations are not required for staff officers.)

(2) For an original license as master, mate, pilot, or operator, the applicant must have correctable vision to at least 20/40 in each eye and uncorrected vision of at least 20/200 in each eye. The color sense must be determined to be satisfactory when tested by any of the following methods:

- (i) Pseudoisochromatic Plates (Dvorine, 2nd Edition; AOC; revised edition or AOC-HRR; Ishihara 16-, 24-, or 38-plate editions).
- (ii) Eldridge—Green Color Perception Lantern.
- (iii) Farnsworth Lantern.
- (iv) Keystone Orthoscope.
- (v) Keystone Telebinocular.
- (vi) SAMCTT (School of Aviation Medicine Color Threshold Tester).
- (vii) Titmus Optical Vision Tester.
- (viii) Williams Lantern.

(3) For an original license as engineer, radio officer, offshore installation manager, barge supervisor or ballast control operator, the applicant must have correctable vision of at least 20/50 in each eye and uncorrected vision of at least 20/200 in each eye. Applicants need only to have the ability to distinguish the colors red, green, blue and yellow.

(4) Where an applicant does not possess the vision, hearing, or general physical condition necessary, the OCMI, after consultation with the examining physician or physician assistant, may recommend a waiver to the Commandant if extenuating circumstances warrant special consideration. Applicants may submit to the Officer in Charge, Marine Inspection, additional correspondence, records and reports in support of this request. In this regard, recommendations from agencies of the Federal Government operating government vessels, as well as owners and operators of private vessels, made in behalf of their employees, will be given full consideration. Waivers are not normally granted to an applicant whose corrected vision in the better eye is not at least 20/40 for deck licenses or 20/50 for engineer licenses or whose uncorrected vision is worse than 20/400 in either eye.

(e) *Experience or training.* (1) All applicants for original licenses and certificates of registry shall present to the OCMI, letters, discharges, or other documents certifying the amount and character of their experience and the names, tonnage and horsepower of the vessels on which acquired. The OCMI must be satisfied as to the authenticity and acceptability of all evidence of experience or training presented. Certificates of discharge are returned to the applicant. The OCMI shall note on the application that service represented by these documents has been verified. All other documentary evidence of service, or authentic copies thereof, are filed with the application. A license is not considered as satisfactory evidence of any qualifying experience.

(2) No original license or certificate of registry may be issued to any naturalized citizen on less experience in any grade or capacity than would have been required of a citizen of the United States by birth.

(3) Experience and service acquired on foreign vessels is creditable for establishing eligibility for an original license, subject to evaluation by the OCMI to determine that it is a fair and reasonable equivalent to service acquired on merchant vessels of the United States, with respect to grade, tonnage, horsepower, waters, and operating conditions. An applicant who has obtained qualifying experience on foreign vessels shall submit satisfactory documentary evidence of such service (including any necessary translation into English) in the forms prescribed by paragraph (e)(1) of this section.

(4) No applicant for an original license who is a naturalized citizen, and who has obtained experience on foreign vessels, will be given an original license in a grade higher than that upon which he or she has actually served while acting under the authority of a foreign license.

(f) *Character check and references.* (1) Each applicant for an original license shall submit written recommendations concerning the applicant's suitability for duty from a master and two other licensed officers of vessels on which the applicant has served. For a license as engineer or as pilot, at least one of the recommendations must be from the chief engineer or licensed pilot, respectively, of a vessel on which the applicant has served. For a license as operator of uninspected towing vessels, the recommendations may be from recent marine employers with at least one recommendation from a master, operator, or person in charge of a vessel upon which the applicant has served. Where an applicant qualifies for a

license through an approved training school, one of the character references must be an official of that school. For a license for which no commercial experience may be required, such as: Master or mate 0-200 gross tons, operator of uninspected passenger vessels, radio officer or certificate of registry, the applicant may have the written recommendations of three persons who have knowledge of the applicant's suitability for duty.

(2) Each applicant's fingerprints are taken during the application process. The fingerprints are checked against the records of law enforcement and other government agencies. The application of any person may be rejected when information has been brought to the attention of the OCMI which indicates that the applicant's habits of life and character are such as to warrant the belief that the applicant cannot be entrusted with the duties and responsibilities of the license for which application is made. In the event an application is rejected, the applicant is notified in writing of the reason(s) for rejection and advised that the appeal procedures in § 10.204 apply. No examination is given in this type of case pending the Commandant's decision on appeal.

(3) A person may apply for an original license, or license of a different type, while on probation as a result of administrative action under Part 5 of this Chapter. The offense for which the applicant was placed on probation will be considered in determining his or her fitness to hold the license applied for. A license issued to an applicant on probation will be subject to the same probationary conditions as were imposed against the applicant's other license or mariner's document. An applicant may not take an examination for a license during any period when a suspension without probation or a revocation is effective against the applicant's currently held license or mariner's document, or while an appeal from these actions is pending.

(g) *Firefighting certificate.* Applicants for the licenses in the following categories must present a certificate of completion from a firefighting course of instruction which has been approved by the Commandant. The course must meet both the basic and advanced sections of the International Maritime Organization's (IMO) Resolution A.437 (XI) "Training of Crews in Firefighting". The course must have been completed within five years before the date of application for the license requested.



(1) Master's license for service on vessels of 200 gross tons or less in ocean service.

(2) All master or mate's licenses for over 200 gross tons.

(3) All operators of uninspected towing vessels, oceans (domestic trade).

(4) All licenses on mobile offshore drilling units.

(5) All engineer's licenses.

(h) *First aid and cardiopulmonary resuscitation (CPR) course certificates.* All applicants for an original license must present to the OCM: (1) A certificate indicating completion of a first aid course within the past 12 months from:

(i) the American National Red Cross "Standard First Aid and Emergency Care" or "Multi-media Standard First Aid" course;

(ii) a Coast Guard approved first aid training course; or,

(iii) a course the OCM determines exceeds the standards of the Red Cross courses; and,

(2) A currently valid certificate of completion of a CPR course from:

(i) the American National Red Cross;

(ii) the American Heart Association; or,

(iii) a Coast Guard approved CPR training course.

(i) *Professional examination.* (1) When an applicant's experience and training are found to be satisfactory and the applicant is eligible in all other respects, the OCM examines the applicant, in writing; except that, if the license is to be limited to uninspected fishing industry vessels, the applicant may request an oral-assisted examination, a record indicating the subjects covered is placed in the applicant's license file. The alternative of an oral-assisted examination is also available to applicants for deck or engineer licenses limited to 500 gross tons. If there is demonstrated difficulty in reading and understanding the questions, the oral-assisted examination shall be offered. Any license based on an oral-assisted examination is limited to the specific route and type of vessel upon which the majority of experience was obtained. The instructions for administration of examinations and the lists of subjects for all licenses are contained in Subpart I of this Part.

(2) When the license application of any person has been approved, the applicant should take the required examination as soon as practicable. If the applicant cannot be examined without delay at the office where the application is made, the applicant may request that the examination be given at another office.

(3) The qualification requirements for "radar observer" are contained in § 10.480.

(4) An examination is not required for a license as radio officer or a certificate of registry.

#### § 10.207 Requirements for raise of grade of license.

(a) *General.* Before any person is issued a raise of grade of license, the applicant shall present satisfactory documentary evidence of eligibility. Applications must be on a Coast Guard furnished form.

(b) *Surrendering old license.* Upon the issuance of a new license for raise of grade, the applicant shall surrender the old license to the OCM. If requested, the old license is returned to the applicant after cancellation.

(c) *Age, experience, and training.* (1) Applicants for raise of grade of licenses shall establish that they possess the age, experience, and training qualifications necessary before they are entitled to a raise of grade of license.

(2) Applicants for raise of grade of license shall present to the OCM at a Regional Examination Center, letters, discharges, or other official documents certifying to the amount and character of their experience and the names of the vessels on which acquired. Certificates of discharge are returned to the applicant after review by the OCM. All other documentary evidence of service, or copies thereof, are filed with the application.

(3) Sea service acquired prior to the issuance of the license held is generally not accepted as any part of the service required for raise of grade of that license. However, service acquired prior to issuance of a license will be accepted for certain crossovers, endorsements or increases in scope of a license, as appropriate. In the limited tonnage categories for deck licenses, total accumulated service is a necessary criterion for most raises in grade; service acquired prior to the issuance of such licenses will, therefore, be accepted.

(4) No raise of grade of license may be issued to any naturalized citizen on less experience in any grade than would have been required of a citizen of the United States by birth.

(5) Experience and service acquired on foreign vessels while holding a valid U. S. license is creditable for establishing eligibility for a raise of grade, subject to evaluation by the OCM to determine that it is a fair and reasonable equivalent to service acquired on merchant vessels of the United States, with respect to grade, tonnage, horsepower, waters and

operating conditions. An applicant who has obtained the qualifying experience on foreign vessels shall submit satisfactory documentary evidence of such service (including any necessary translations into English) of such service in the forms prescribed by paragraph (c)(2) of this section.

(6) An applicant remains eligible for a raise of grade of license while on probation as a result of action under Part 5 of this chapter.

A raise of grade of license issued to a person on probation will be subject to the same probationary conditions imposed against the applicant's other certificates or licenses. The offense for which he or she was placed on probation will be considered on the merits of the case in determining fitness to hold the license applied for. No applicant will be examined for a raise of grade of license during any period when a suspension without probation or a revocation imposed under Part 5 of this Chapter is effective against the applicant's license or certificate or while an appeal from these actions is pending.

(d) *Professional examination.* (1) When an applicant's experience and training for raise of grade is found to be satisfactory and he or she is eligible in all other respects, the OCM examines the applicant in writing, unless an oral-assisted examination is authorized under § 10.205(i)(1). A record indicating the subjects covered is placed in the applicant's license file. The general instructions and list of subjects are contained in Subpart I of this Part.

(2) The qualification requirements for "radar observer" are contained in § 10.480.

(e) *Physical requirements.* (1) An applicant for raise of grade of a license who has not had a physical examination for an original license or renewal of license within three years must submit a certification by a licensed physician or physician assistant that he or she is in good health and has no physical impairment or medical condition which would render him or her incompetent to perform the ordinary duties of the license applied for.

(2) If the OCM has reason to believe that an applicant for raise of grade of license suffers from some physical impairment or medical condition which would render the applicant incompetent to perform the ordinary duties of that license, the applicant may be required to submit the results of an examination by a licensed physician or physician assistant that meets the requirements for an original license.

(3) An applicant who has lost the sight of one eye may obtain a raise of grade



of license, provided that the applicant is qualified in all other respects and that the visual acuity in the one remaining eye passes the test required under § 10.205(d).

(f) *Firefighting certificate.* Applicants for raise of grade of license who have not previously met the requirements in § 10.205(g), must do so.

#### § 10.209 Requirements for renewal of license.

(a) *General.* Applicants for renewal of licenses shall establish that they possess all of the qualifications necessary before they are issued a renewal of license. All applications must be on a Coast Guard furnished form. The applicant may appear in person at any Regional Examination Center listed in § 10.107 or may renew the license by mail under paragraph (e)(3) of this section. The applicant must submit the license to be renewed or a photocopy of the license. If requested, the old license is returned to the applicant.

(b) *Fitness.* No license is renewed if it has been suspended without probation or revoked as a result of action under Part 5 of this Chapter, or facts which would render a renewal improper have come to the attention of the Coast Guard.

(c) *Professional requirements.* (1) In order to renew a license as master, mate, engineer, pilot, or operator, the applicant shall:

(i) present evidence of at least one year of sea service during the past five years; or,

(ii) pass a comprehensive, open-book exercise covering the general subject matter contained in appropriate sections of Subpart I of this Part; or,

(iii) complete an approved refresher training course; or,

(iv) present evidence of employment in a position closely related to the operation, construction or repair of vessels (either deck or engineer as appropriate) for at least three years during the past five years. An applicant for a deck license with this type of employment must also demonstrate knowledge on an applicable Rules of the Road exercise.

(2) All applicants for renewal of license must present a valid certificate of completion of a CPR course from those sources listed in § 10.205(h)(2).

(3) The qualification requirements for renewal of "radar observer" endorsement are in § 10.480.

(4) Additional qualification requirements for renewal of a license as pilot are contained in § 10.713.

(5) An applicant for renewal of a radio officer's license shall, in addition to meeting the requirements in this

Subpart, present a currently valid license as first- or second-class radiotelegraph operator issued by the Federal Communications Commission. This license is returned to the applicant.

(d) *Physical requirements.* (1) An applicant for renewal of a license shall submit a certification by a licensed physician or physician assistant that he or she is in good health and has no physical impairment or medical condition which would render him or her incompetent to perform the ordinary duties of that license. This certification must address visual acuity and hearing in addition to general physical condition and must have been completed within the previous 12 months.

(2) If the OCMC has reason to believe that an applicant for renewal of license suffers from some physical impairment or medical condition which would render the applicant incompetent to perform the ordinary duties of that license, the applicant may be required to submit the results of an examination by a licensed physician or physician assistant that meets the requirements for original license.

(3) An applicant who has lost the sight of one eye may obtain a renewal of license, provided that the applicant is qualified in all other respects and that the visual acuity in the one remaining eye passes the test required under § 10.205(d).

(e) *Special circumstances.*—(1) *Period of grace.* Except as provided herein, a license may not be renewed more than 12 months after it has expired. To obtain a reissuance of the license, an applicant must comply with the requirements of paragraph (f) of this section. When an applicant's license expires during a time of service with the Armed Forces and there was no reasonable opportunity for renewal, including by mail, this period may be extended. The period of military service following the date of license expiration which precluded renewal may be added to the 12 month period of grace. A license is not valid for use after the expiration date.

(2) *Renewal in advance.* A license may not be renewed more than 12 months in advance of the date of expiration unless the OCMC is satisfied that there are extraordinary circumstances that justify a renewal beforehand.

(3) *Renewal by mail.* (i) An applicant may renew a license by mail by making application to the Coast Guard office which issued the present license or holds the applicant's file. The following documents must be submitted:

(A) A properly completed application on a Coast Guard furnished form, with signature notarized;

(B) The license to be renewed, or a photocopy of the license if it is unexpired;

(C) A certification from a licensed physician or physicians assistant in accordance with paragraph (d) of this section;

(D) If the applicant desires to renew a radar observer endorsement, either the radar observer certificate or a certified copy; and,

(E) Evidence of, or acceptable substitute for, sea service.

(ii) The open-book exercise, if required, may be administered through the mail.

(iii) Upon receipt of the renewed license, the applicant must sign it in order to validate the license.

(f) *Reissue of expired license.* Whenever an applicant applies for reissuance of a license more than 12 months after expiration, the applicant must complete an approved course or pass an examination to demonstrate continued professional knowledge. The examination may be oral or orally assisted if the license being renewed was awarded based on such an oral exam. In the case of an expired radio officer's license, the license may be reissued upon presentation of a valid first or second-class radiotelegraph operator license issued by the Federal Communications Commission.

#### § 10.211 Creditable service and equivalents for licensing purposes.

(a) Sea service may be documented for licensing purposes in various forms such as certificates of discharge, pilotage service and billing forms, and letters or other official documents from marine companies signed by appropriate officials or licensed masters. For service on vessels of under 200 gross tons, owners of vessels may attest to their own service; however, those who do not own a vessel must obtain letters or other evidence from licensed personnel or the owners of the vessels listed. The documentary evidence produced by the applicant must contain the amount and nature (e.g. chief mate, assistant engineer, etc.) of the applicant's experience, the vessel name, gross tonnage, shaft horsepower and official numbers, the routes upon which the experience was acquired, and approximate dates of service.

(b) Port engineer, shipyard superintendent experience, instructor service, or similar related service may be creditable for a maximum of six months of service for raise of grade of an engineer or deck license, as appropriate, using the following:



(1) Port engineer or shipyard superintendent experience is creditable on a three-for-one basis for a raise of grade. (Twelve months of experience equals four months of creditable service.)

(2) Service as a bona fide instructor at a school of navigation or marine engineering is creditable on a two-for-one basis for a raise of grade. (Twelve months of experience equals six months of creditable service.)

(c) Service on mobile offshore drilling units is creditable for raise of grade of license. Evidence of one year's service while holding a license as third mate or third assistant engineer is acceptable for a raise of grade to second mate or second assistant engineer, respectively; however, any subsequent raises of grade of unlimited, non-restricted licenses must include a minimum of six months of service on conventional vessels.

(d) Service on a Dual Mode Integrated Tug Barge (ITB) unit is creditable for original or raise of grade of any deck licenses. Service on a Dual Mode ITB with an aggregate tonnage of over 1600 gross tons is creditable on a two-for-one basis (two days experience equals one day of creditable service) for up to 50 percent of the total service on vessels over 1600 gross tons required for an unlimited license. The remaining required service on vessels of over 1600 gross tons must be obtained on conventional vessels or Push Mode ITBs.

(e) Other experience in a marine related area, other than at sea, or sea service performed on unique vessels, will be evaluated by the OCM and forwarded to the Commandant for a determination of equivalence to traditional service.

**§ 10.213 Sea service as a member of the Armed Forces of the United States and on vessels owned by the United States as qualifying experience.**

(a) Sea service as a member of the Armed Forces of the United States will be accepted as qualifying experience for an original, raise of grade, or increase in scope of all licenses. In most cases, military sea service will have been performed upon ocean waters; however, inland service, as may be the case on smaller vessels, will be credited in the same manner as conventional evaluations. The applicant must submit an official transcript of sea service as verification of the service claimed when the application is submitted.

The applicant must also provide the Officer in Charge, Marine Inspection other necessary information as to tonnage, routes, horsepower, percentage of time underway, and assigned duties

upon the vessels which he or she served. Such service will be evaluated by the OCM and forwarded to the Commandant for a determination of its equivalence to sea service acquired on merchant vessels and the appropriate grade, class, and limit of license for which the applicant is eligible.

Normally, 60 percent of the total time on board is considered equivalent underway service; however, the periods of operation of each vessel may be evaluated separately. In order to be eligible for a master's or chief engineer's unlimited license, the applicant must have acquired military service in the capacity of commanding officer or engineer officer, respectively.

(b) Service in deck ratings on military vessels such as seaman apprentice, seaman, boatswain's mate, quartermaster, or radarman are considered deck service for licensing purposes. Service in other ratings may be considered if the applicant establishes that his or her duties required a watchstanding presence on or about the bridge of a vessel. Service in engineer ratings on military vessels such as fireman apprentice, fireman, engineman, machinists, mate, machinery technician or boiler tender are considered engineer service for licensing purposes. There are also other ratings such as electrician, hull technician, or damage controlman which may be credited when the applicant establishes that his or her duties required watchstanding duties in an operating engine room.

(c) In addition to underway service, members of the Armed Forces may obtain creditable service for periods of assignment to vessels at times other than underway, such as in port, at anchor, or in training. Normally, a 25% factor is applied to these time periods. This experience can be equated with general shipboard familiarity, training, ship's business, and other related duties.

(d) Sea service obtained on submarines is creditable, as if it were surface vessel service, for deck and engineer licenses under the provision of paragraph (a) of this section. For application to deck licenses, submarine service may be creditable if at least 25 percent of all service submitted for the license was obtained on surface vessels (e.g. If four years' total service were submitted for an original license, at least one year must have been obtained on surface craft in order for the submarine service to be eligible for evaluation).

(e) Service gained in a civilian capacity as commanding officer, master, mate, engineer, or pilot, etc., of any vessel owned and operated by the United States, in any service, in which a

license as master, mate, engineer, or pilot was not required at the time of such service, is evaluated by the OCM and forwarded to the Commandant for a determination of equivalence.

**§ 10.215 Modification or removal of limitations.**

(a) If an Officer in Charge, Marine Inspection, is satisfied by the documentary evidence submitted that an applicant is entitled by experience, training, and knowledge to an endorsement or increase in the scope of any license held, any limitations which were previously placed upon the license by that OCM may be changed. Such an increase in scope may include horsepower or tonnage limitations, or geographic route restrictions.

(b) An OCM may not change a limitation on any license which that office did not place thereon before full information regarding the reason for the limitation is obtained from the OCM responsible for the limitation.

(c) No limitation on any license may be changed before the applicant has made up any deficiency in the experience prescribed for the license or endorsement desired and passed any necessary examination.

**§ 10.217 Examination procedures and denial of licenses.**

(a)(1) The examinations for all deck and engineer unlimited licenses are administered at periodic intervals. If the applicant fails three or more sections of the examination, a complete reexamination must be taken, but may be taken during any of the scheduled exam periods. On the subsequent exam, if the applicant again fails three or more sections, at least three months must lapse before another complete examination is attempted. If an applicant fails one or two sections of an examination, he or she may be retested twice on these sections during the next three months. If the applicant does not successfully complete these sections within the three month period, a complete reexamination must be taken, after a lapse of at least three months from the date of the last retest.

(2) The scheduling of all other deck and engineer license examinations will be at the discretion of the OCM. In the event of a failure, the applicant may be retested twice whenever the examination can be scheduled with the OCM. The applicant must be examined in all of the unsatisfactory sections of the preceding examination. If the applicant does not successfully complete all parts of the examination during a three month period from the



initial test date, a complete reexamination must be taken, after a lapse of at least two months from the date of the last retest.

(b) If the OCMI refuses to grant an applicant the license for which applied due to failing to pass a required examination, the applicant is furnished a written statement setting forth the portions of the examination which must be retaken and the date by which the examination must be completed.

#### **§ 10.219 Issuance of duplicate license.**

Whenever a person to whom a license has been issued loses the license, that person shall report the loss to any OCMI. A duplicate license may be issued after the OCMI receives an application with an affidavit describing the circumstances of the loss from the applicant and verification of the license record from the Regional Examination Center where it was issued or from the Commandant. The duplicate license will be prepared in the same format and wording as the license being replaced. A duplicate license is issued for the unexpired term of the lost license and bears the following statement: "This license replaces License Number \_\_\_\_\_ issued at \_\_\_\_\_ on the above date." (See 33 CFR 1.25-40(b) for fees.)

#### **§ 10.221 Parting with license.**

The holder of a license shall not voluntarily part with it or place it beyond his or her personal control by pledging or depositing it with any other person for any purpose. If the holder violates this section, he or she may be proceeded against in accordance with the provisions of Part 5 of this Chapter, looking to a suspension or revocation of the license.

#### **§ 10.223 Suspension and revocation of licenses.**

(a) When the license of any individual is revoked, it is no longer valid for any purpose and any license of the same type subsequently requested must be applied for as an original license, except as to number of issue.

(b) No person whose license is suspended without probation or has been revoked may be issued another license without approval of the Commandant.

(c) When a license which is about to expire is suspended, the renewal of such license will be withheld until expiration of the period of suspension.

### **Subpart C—Training Schools with Approved Courses**

#### **§ 10.301 Applicability.**

This Subpart prescribes the general requirements applicable to all approved courses which may be accepted in lieu

of service experience or examination required by the Coast Guard, or which satisfy course completion requirements.

#### **§ 10.302 Course approval.**

(a) The Coast Guard only approves courses satisfying regulatory requirements. The owner or operator of a training school desiring to have a course approved by the Coast Guard shall submit a written request through the appropriate Officer in Charge, Marine Inspection to the Commandant (G-MVP) U.S. Coast Guard, Washington, DC 20593-0001, that contains:

(1) A list of the curriculum including a description of and the number of classroom hours required in each subject;

(2) A description of the facility and equipment;

(3) A list of instructors including the experience, background, and the qualifications of each; and

(4) Specify the Coast Guard training requirements the course is intended to satisfy.

(b) The Coast Guard notifies each applicant in writing whether or not an approval is granted. If a request for approval is denied, the Coast Guard informs the applicant the reasons for the denial and describes what corrections are required for an approval.

(c) Unless sooner surrendered, suspended or revoked, an approval for a course at a training school that meets Coast Guard standards expires 24 months after the month in which it is issued, or on the date of any change in the ownership of the school for which it was issued, whichever occurs first.

(d) If the owner or operator of a training school desires to have a course approval renewed, they shall submit a written request to the address listed in paragraph (a) of this section. For the request to be approved, the Coast Guard must be satisfied that the content and quality of instruction remain satisfactory. Unless sooner surrendered, suspended or revoked, a renewal of the approval expires 60 months after the month it is issued, or on the date of any change in ownership of the school for which it is issued, whichever occurs first.

#### **§ 10.303 General standards.**

Each school with an approved course must:

(a) Have a well maintained facility that accommodates the students in a safe and comfortable environment conducive to learning.

(b) Have visual aids for realism, including simulators where appropriate, which are modern and well maintained

and sufficient for the number of students to be accommodated.

(c) Give appropriate written or practical examinations in the course material to each student of such a degree of difficulty that a student who successfully completes them could reasonably assume that he or she would pass, on the first attempt, an examination prepared by the Coast Guard based upon knowledge requirements of the position or endorsement for which the student is being trained.

(d) Keep for at least one year after the end of each student's enrollment:

(1) Each written examination, or in the case of a practical test, a report of such test; and

(2) A record of each student's classroom attendance.

(e) Not change its approved curriculum unless approved, in writing, after the request for change has been submitted in writing through the appropriate Officer in Charge, Marine Inspection to the Commandant (G-MVP), U.S. Coast Guard.

(f) At any time the Officer in Charge, Marine Inspection shall direct, allow the Coast Guard to:

(1) Inspect its facilities, equipment, and records, including scholastic records;

(2) Conduct interviews and surveys of students to aid in course evaluation and improvement;

(3) Assign personnel to observe or participate in the course of instruction; and

(4) Supervise or administer the required examinations or practical demonstrations.

#### **§ 10.304 Substitution of training for required service.**

(a) Satisfactory completion of certain training courses approved by the Commandant may be substituted for a portion of the required service for many deck and engineer licenses and for qualified ratings of unlicensed personnel. The list of all currently approved courses of instruction including the equivalent service and applicable licenses and ratings is maintained by Commandant (G-MVP). Satisfactory completion of an approved training course may be substituted for not more than two-thirds of the required service on deck or in the engine department of deck or engineer licenses, respectively, and for qualified ratings.

(b) Service time gained at an approved training course does not satisfy recent service requirements nor does training on a simulator; however, any underway service at an approved



course may be used for this purpose. An applicant who had met the recent service requirement before entering school will not be penalized by attending the approved training course.

(c) Training obtained prior to receiving a license may not be used for subsequent raises of grade.

(d) Simulator training in combination with a Coast Guard approved training course may be submitted to the Commandant for evaluation and determination of equivalency to required sea service. Simulator training cannot be substituted for recency requirements, but may substitute for a maximum of 25 percent of the required service for any license transaction.

#### **§ 10.305 Radar observer qualifying courses.**

(a) A student who takes an approved course of training, including passing both examinations and practical demonstration on a simulator, and who meets the requirements of this section is entitled to an appropriate radar observer certificate:

(1) In a form prescribed by the school that is acceptable to the Coast Guard; and

(2) Signed by the head of the school.

(b) The following radar observer certificates are issued under this section:

(1) Radar Observer (Unlimited).

(2) Radar Observer (Inland Waters)

(3) Radar Observer (Unlimited

Renewal).

(4) Radar Observer (Inland Waters Renewal).

(c) A school with an approved radar observer course may not issue a certificate listed in paragraph (b) of this section unless the student has successfully completed the appropriate curriculum as follows:

(1) Radar Observer (Unlimited). Classroom instruction, including demonstrations and practical exercises using simulators, and examination in the following subjects:

(i) Fundamentals of radar

(A) How radar works.

(B) Factors affecting the performance and accuracy of marine radar

(C) Description of the purpose and functions of the main components that comprise a typical marine radar installation.

(ii) Operation and use of radar:

(A) The purpose and adjustment of controls.

(B) The detection of malfunctions, false and indirect echoes, and other radar phenomena.

(C) The effect of sea return and weather.

(D) The limitation of radar resulting from design factors.

(E) Precautions to be observed in performing maintenance of radar equipment.

(F) Range and bearing measurement.

(G) Effect of size, shape, and composition of ship targets on echo.

(iii) Interpretation and analysis of radar information:

(A) Determining the course and speed of another vessel.

(B) Determining the time and distance of closest point of approach of a crossing, meeting, overtaking, or overtaken vessel.

(C) Detecting changes of course and/or speed of another vessel after its initial course and speed have been established.

(D) Factors to consider when determining change in course and/or speed of a vessel to prevent collision, on the basis of radar observation, with other vessels.

(iv) Plotting (any method that is graphically correct may be used):

(A) The principles and method of plotting relative and true motion.

(B) Practical plotting problems.

(2) Radar Observer (Inland Waters). Classroom instruction, including

demonstration and practical exercises using simulators and examination in the subjects listed in paragraph (c)(1) of this section with emphasis on unique problems attendant to inland waters, with the exception of paragraph (c)(1)(iv) of this section.

(3) Radar Observer (Unlimited Renewal). Classroom instruction, including demonstration and practical exercises using simulators, and examination, in the subjects listed in paragraphs (c)(1) (iii) and (iv) of this section.

(4) Radar Observer (Inland Waters Renewal). Classroom instruction, including demonstration and practical exercises using simulators, and examinations in the subjects listed in paragraph (c)(1)(iii) of this section.

#### **§ 10.307 Training schools with approved radar observer courses.**

The Commandant (G-MVP) U.S. Coast Guard, 2100 Second St., Washington, DC 20593-0001, maintains the list of approved schools and specific courses. This information is available upon request by writing the aforementioned address or calling (202) 267-0224.

#### **Subpart D—Professional Requirements for Deck Officers Licenses**

##### **§ 10.401 Ocean and near coastal licenses.**

(a) Any license issued for service as master or mate on ocean waters

qualifies the licensee to serve in the same grade on any waters, subject to the limitations of the license, without additional endorsement.

(b) A license issued for service as master or mate on near coastal waters qualifies the licensee to serve in the same grade on near coastal, Great Lakes, and inland waters, subject to the limitations of the license, without additional endorsement.

(c) Near coastal licenses of any gross tons require the same number of years of service as the ocean unlimited licenses. The primary differences in these licenses are the nature of the service and the professional examination as explained in Subpart I of this Part.

(d) A licensee having a master or mate near coastal license obtained with ocean service may have the license endorsed for ocean service by completing the appropriate examination deficiencies.

(e) Master or third mate near coastal unlimited licenses may be obtained by completing the prescribed examination in Subpart I of this Part and satisfying the requirements of subparagraph (g) while holding a license as unlimited master or mate, respectively, upon Great Lakes and inland waters. To have a near coastal unlimited license obtained in this manner endorsed for ocean service, the licensee must obtain 12 months of service as a deck watch officer or higher on ocean waters on vessels of 1600 gross tons or over, in addition to completing the examination topics.

(f) Masters and mates licenses for service on vessels of over 200 gross tons may be endorsed for sail or auxiliary sail as appropriate. The applicant must present the equivalent total qualifying service required for conventional licenses including at least one year of deck experience on that specific type of vessel. For example, for a license as master of vessels of not more than 1600 gross tons endorsed for auxiliary sail, the applicant must meet the total experience requirements for the conventional license, including time as mate, and the proper tonnage experience, including at least one year of deck service on appropriately sized auxiliary sail vessels. For license endorsement for service on vessels of 200 gross tons or less see individual license requirements.

(g) In order to obtain a master or mate license with a tonnage limit above 200 gross tons, or a license for 200 gross tons or less with an ocean route, the applicant must successfully complete the following training and examination requirements:



- (1) approved firefighting course;
- (2) approved radar observer course; and,
- (3) qualification as an able seaman unlimited or able seaman limited (able seaman special or able seaman offshore supply vessels satisfy the able seaman requirement for licenses permitting service on vessels of 1600 gross tons and less).

**§ 10.402 Tonnage requirements for ocean or near coastal licenses for vessels of over 1600 gross tons.**

(a) All required experience for ocean or near coastal licenses for vessels of any gross tons must be obtained on vessels of over 200 gross tons with the exception of the prescribed progression from the 1600 gross ton category. At least one-half of the required experience must be obtained on vessels of over 1600 gross tons.

(b) If the applicant for an original or raise of grade of a license as master or mate does not meet the requirements of

paragraph (a) of this section, a tonnage limitation is placed on the license based on the applicant's qualifying experience. The license is limited to the maximum tonnage on which at least 25 percent of the required experience was obtained, or 150 percent of the maximum tonnage on which at least 50 percent of the service was obtained, whichever is higher. Limitations are in multiples of 1000 gross tons, using the next higher figure when an intermediate tonnage is calculated. When the calculated limitation equals or exceeds 10,000 gross tons, the applicant is issued an unlimited tonnage license.

(c) Tonnage limitations imposed under paragraph (b) of this section may be raised or removed in the following manner:

(1) When the applicant has six months of service on vessels of over 1600 gross tons in the highest grade licensed, all tonnage limitations are removed.

(2) When the applicant has a total of six months of service on vessels of over

1600 gross tons in any licensed capacity other than the highest grade for which licensed, all tonnage limitations for the grade in which the service is performed are removed and the next higher grade license is raised to the tonnage of the vessel on which the majority of the service was performed. The total cumulative service before and after issuance of the limited license may be considered in removing all tonnage limitations.

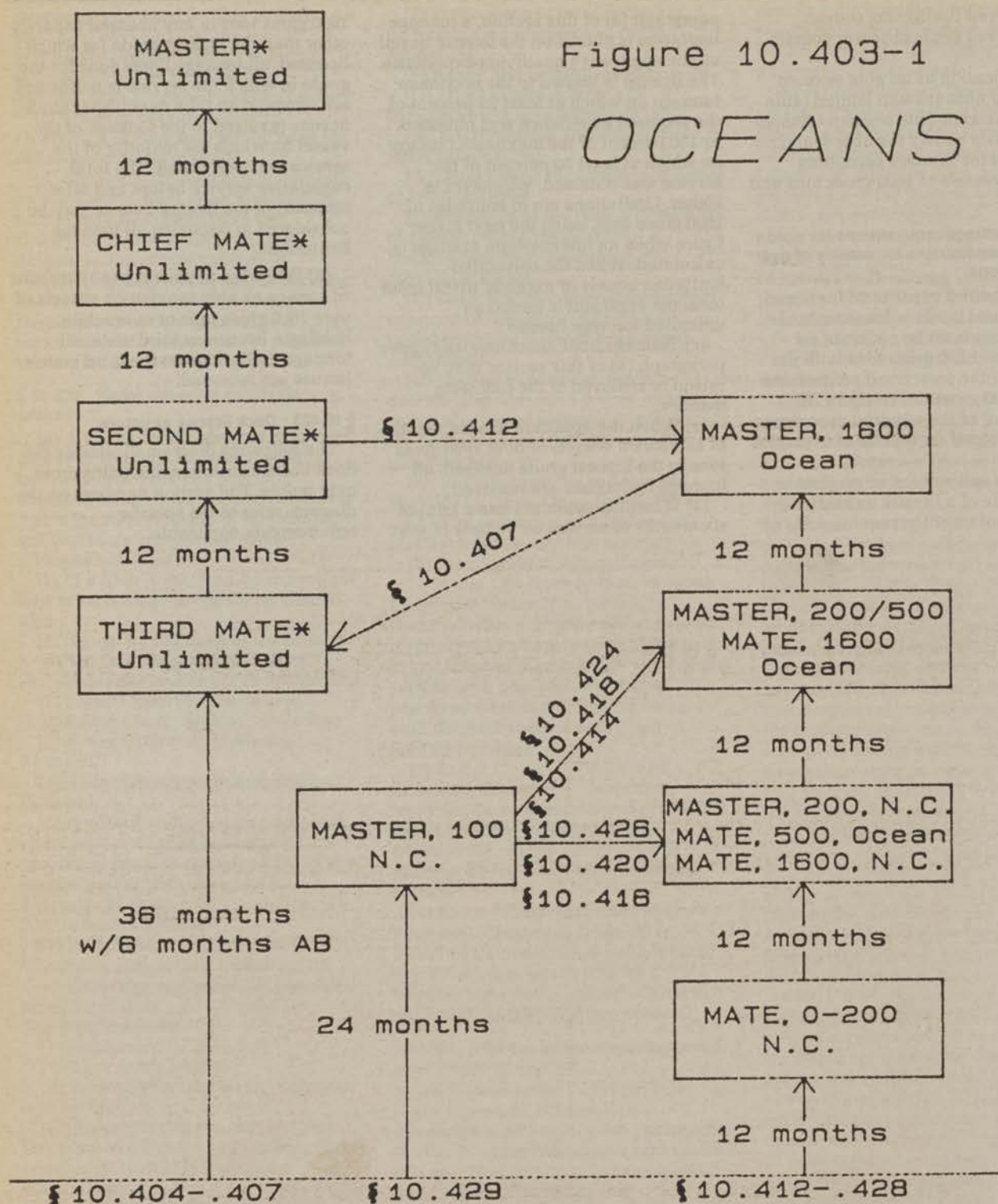
(3) When the applicant has 12 months of service as able seaman on vessels of over 1600 gross tons or over while holding a license as third mate, all tonnage limitations on the third mate's license are removed.

**§ 10.403 Deck license structure.**

The following diagram illustrates the deck license structure, including cross over points. The section numbers on the diagram refer to the specific requirements applicable.



Figure 10.403-1

*OCEANS*

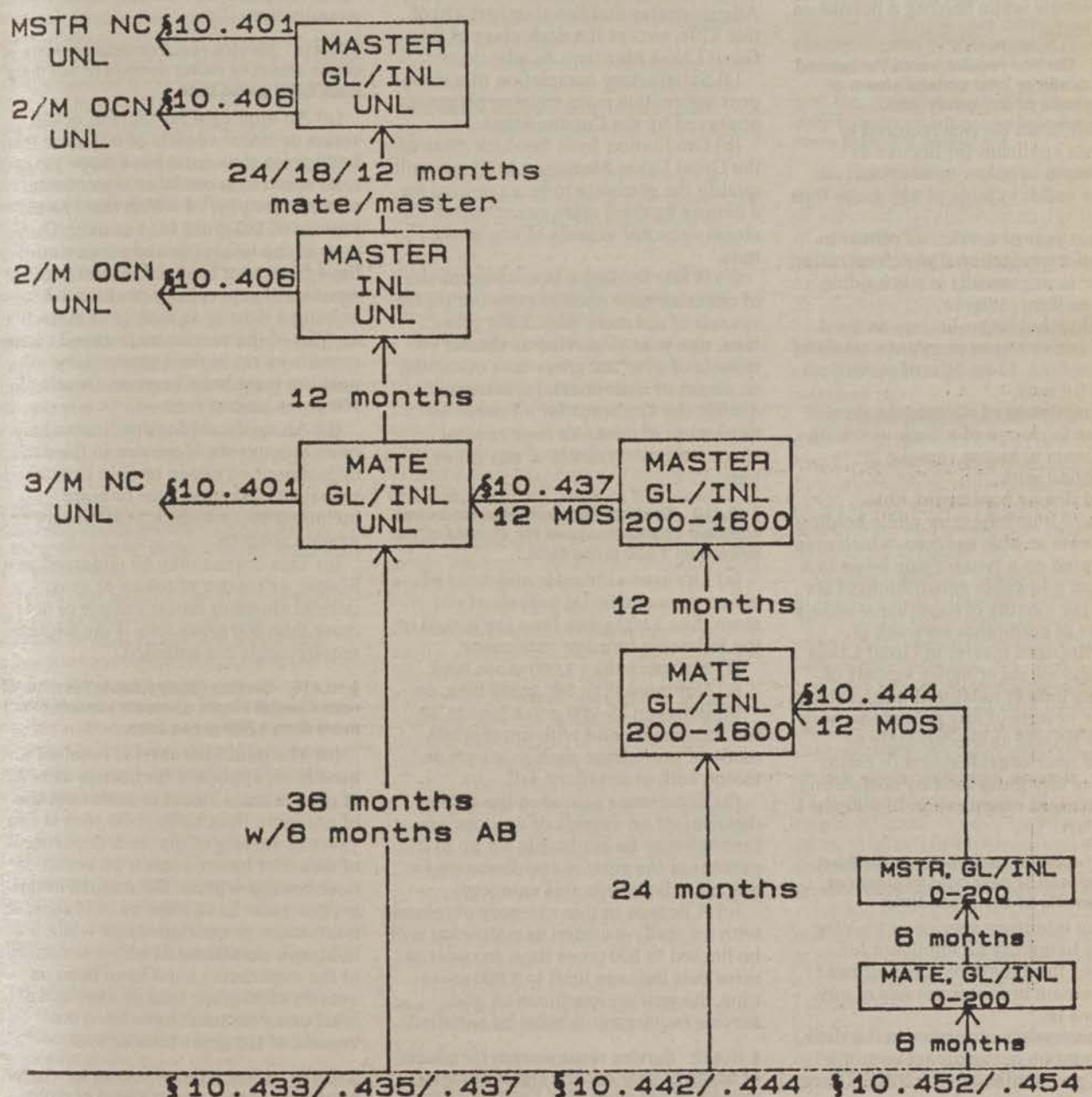
\*Licenses for service on vessels of over 1600 gross tons on near coastal routes parallel this structure for service and tonnage requirements. The examinations contain all subjects except those which are appropriate only for ocean licenses, i.e., celestial navigation, ocean sailing problems etc., as indicated in Subpart 10.900.



## Deck License Structure

Figure 10.403-2

## INLAND



§ 10.404 Service requirements for master of ocean or near coastal steam or motor vessels of any gross tons.

The minimum service required to qualify an applicant for license as master of ocean or near coastal steam or motor vessels of any gross tons is:

- (a) One year of service as chief mate on ocean steam or motor vessels; or,
- (b) One year of service on ocean steam or motor vessels while holding a license as chief mate of ocean steam or motor vessels as follows:

- (1) A minimum of six months of

service as chief mate; and,

- (2) Service as officer in charge of a navigational watch accepted on a two-for-one basis (12 months as second or third mate equals six months of creditable service).

BILLING CODE 4910-14-M



**§ 10.405 Service requirements for chief mate of ocean or near coastal steam or motor vessels of any gross tons.**

The minimum service required to qualify an applicant for license as chief mate of ocean or near coastal steam or motor vessels of any gross tons is one year of service as officer in charge of a navigational watch on ocean steam or motor vessels while holding a license as second mate.

**§ 10.406 Service requirements for second mate of ocean or near coastal steam or motor vessels of any gross tons.**

The minimum service required to qualify an applicant for license as second mate of ocean or near coastal steam or motor vessels of any gross tons is:

(a) One year of service as officer in charge of a navigational watch on ocean steam or motor vessels while holding a license as third mate; or,

(b) While holding a license as third mate of ocean steam or motor vessels of any gross tons, 12 months of service on deck as follows:

(1) A minimum of six months service as officer in charge of a deck watch on ocean steam or motor vessels; in combination with,

(2) Service as boatswain, able seaman, or quartermaster while holding a certificate as able seaman, which may be accepted on a two-for-one basis to a maximum allowable substitution of six months (12 months of experience equals 6 months of creditable service); or,

(c) A licensed master of Great Lakes and inland steam or motor vessels of any gross tons or master of inland steam or motor vessels of any gross tons, may obtain a license as second mate of ocean or near coastal steam or motor vessels of any gross tons by completing the prescribed examination in Subpart I of this Part.

**§ 10.407 Service requirements for third mate of ocean or near coastal steam or motor vessels of any gross tons.**

(a) The minimum service or training required to qualify an applicant for license as third mate of ocean or near coastal steam or motor vessels of any gross tons is:

(1) Three years of service in the deck department on ocean steam or motor vessels, six months of which shall have been as able seaman, boatswain, or quartermaster, while holding a certificate as able seaman. Experience gained in the engine department on vessels of appropriate tonnage may be creditable for up to three months of the service requirements for this license; or,

(2) Graduation from:

(i) The U.S. Merchant Marine Academy (deck curriculum);

(ii) The U.S. Coast Guard Academy and qualification as an underway officer in charge of a navigational watch;

(iii) The U.S. Naval Academy and qualification as an underway officer in charge of a navigational watch; or,

(iv) The deck class of a maritime academy approved by and conducted under rules prescribed by the Maritime Administrator and listed in Part 310 of this Title, except the deck class of the Great Lakes Maritime Academy; or,

(3) Satisfactory completion of a three year apprentice mate training program approved by the Commandant.

(b) Graduation from the deck class of the Great Lakes Maritime Academy will qualify the graduate to be examined for a license as third mate near coastal steam or motor vessels of any gross tons.

(c) While holding a license as master of ocean or near coastal steam or motor vessels of not more than 1,600 gross tons, one year of service as master on vessels of over 200 gross tons operating on ocean or near coastal waters will qualify the applicant for a license as third mate of ocean or near coastal steam or motor vessels of any gross tons.

**§ 10.410 Tonnage requirements for ocean and near coastal licenses for vessels of not more than 1,600 gross tons.**

(a) Licenses as master and mate of ocean or near coastal vessels of not more than 1,600 gross tons are issued in the following tonnage categories:

(1) Not more than 1,600 gross tons;

(2) Not more than 500 gross tons; or,

(3) Between 25–200 gross tons in 50 ton increments and with appropriate mode of propulsion such as steam or motor, sail, or auxiliary sail.

(b) Experience gained in the engine department on vessels of appropriate tonnage may be creditable for up to 25 percent of the service requirements for any mate license in this category.

(c) A license in this category obtained with an orally-assisted examination will be limited to 500 gross tons. In order to raise that tonnage limit to 1,600 gross tons, the written examination and service requirements must be satisfied.

**§ 10.412 Service requirements for master of ocean or near coastal steam or motor vessels of not more than 1,600 gross tons.**

(a) An applicant for master of ocean or near coastal steam or motor vessels of not more than 1,600 gross tons must have four years of total service on ocean or near coastal waters, two years of which must be on vessels of 100 gross tons or over. Two years of the total required service must have been as a licensed master or mate. One year of the

service as licensed master, mate or equivalent supervisory position must have been on vessels of 100 gross tons or over.

(b) An applicant holding a license as second mate of ocean or near coastal steam or motor vessels of over 1,600 gross tons is eligible for this license upon completion of a limited examination.

**§ 10.414 Service requirements for mate of ocean steam or motor vessels of not more than 1,600 gross tons.**

(a) An applicant for mate of ocean steam or motor vessels of not more than 1,600 gross tons must have three years of total service on ocean or near coastal waters, one year of which must be on vessels of 100 gross tons or over. One year of the total required service must have been as a licensed master, mate or equivalent supervisory position while holding a license as master or mate. Six months of the service as licensed master or mate or equivalent supervisory position must have been on vessels of 100 gross tons or over.

(b) An applicant for this license may have three years of service in the deck department on ocean or near coastal vessels of 200 gross tons or more including at least six months of service as able seaman.

(c) This license may be endorsed on a license as master of ocean or near coastal steam or motor vessels of not more than 500 gross tons if the tonnage requirements are satisfied.

**§ 10.416 Service requirements for mate of near coastal steam or motor vessels of not more than 1,600 gross tons.**

(a) The minimum service required to qualify an applicant for license as mate of near coastal steam or motor vessels of not more than 1,600 gross tons is two years of service in the deck department of steam or motor vessels on ocean or near coastal waters. Six months of this service must have been as able seaman, boatswain, or quartermaster while holding a certificate as able seaman. All of the experience must have been on vessels of 50 gross tons or over and at least one year must have been on vessels of 100 gross tons or over.

**§ 10.418 Service requirements for master of ocean or near coastal steam or motor vessels of not more than 500 gross tons.**

(a) An applicant for a license as master of ocean or near coastal steam or motor vessels of not more than 500 gross tons must have three years total service on ocean or near coastal waters. Two years of this service must have been as a licensed master, mate or equivalent supervisory position while holding a



license as master or mate. One year of the service as licensed master or mate or equivalent must have been on vessels of 50 gross tons or over.

(b) An applicant holding a license as operator of uninspected towing vessels upon ocean or near coastal routes is eligible for this license after six months of service as operator on ocean or near coastal waters and completion of a limited examination. This requires three and one-half years of service. Two years of this service must have been served while holding a license as operator, second-class operator or mate.

**§ 10.420 Service requirements for mate of ocean or near coastal steam or motor vessels of not more than 500 gross tons.**

An applicant for a license as mate of ocean or near coastal steam or motor vessels of not more than 500 gross tons must have one year of service on ocean or near coastal waters as a licensed mate or equivalent supervisory position while holding a license as master, mate, operator of uninspected towing vessels, or operator of uninspected passenger vessels. Six months of this service must have been on vessels of 50 gross tons or more.

**§ 10.422 Tonnage limitations and qualifying requirements for licenses as master or mate of vessels of not more than 200 gross tons.**

(a) Except as noted in subparagraph (e), all licenses issued for master or mate of vessels of not more than 200 gross tons are issued in 50 gross ton increments based on the applicant's qualifying experience. The license is limited to the maximum tonnage on which at least 25 percent of the required experience was obtained, or 150 percent of the maximum tonnage on which at least 50 percent of the service was obtained, whichever is higher. Limitations are in multiples of 50 gross tons using the next higher figure when an intermediate tonnage is calculated.

(b) The tonnage limitation on these licenses may be raised upon completion of:

(1) At least 45 days of additional service on deck on a vessel of a higher tonnage for a tonnage increase on a mate's license; or,

(2) At least 90 days of additional service on deck on a vessel of a higher tonnage for a tonnage increase on a master's license; or,

(3) Additional service, which, when combined with all previously accumulated service, will qualify the applicant for a higher tonnage license under the basic formula; or,

(4) Six months of service on vessels within the highest tonnage increment on

the license. In this case, the tonnage limitation may be raised one increment.

(c) When the service is obtained on vessels upon which licensed personnel are not required, the OCM must be satisfied that the nature of this qualifying service (i.e., size of vessel, route, equipment, etc.) is a reasonable equivalent to the duties performed on vessels which are required to engage licensed individuals.

(d) Service gained in the engineroom on vessels of not more than 200 gross tons may be creditable for up to 25 percent of the deck service requirements for mate.

(e) When the qualifying service is obtained upon vessels of five gross tons or less, the license will be limited to vessels of not more than 25 gross tons.

**§ 10.424 Service requirements for master of ocean steam or motor vessels of not more than 200 gross tons.**

(a) An applicant for a license as master of ocean steam or motor vessels of not more than 200 gross tons must have a total of three years of service on ocean or near coastal waters. Service on inland waters may substitute for a maximum of 18 months of the required three years. Two years of this service must have been as a licensed master, mate or equivalent supervisory position while holding a deck license authorizing service on such vessels.

(b) An applicant is eligible for a license as master of ocean steam or motor vessels of not more than 200 gross tons if the applicant has two years of service as licensed operator or second-class operator of uninspected towing vessels upon ocean or near coastal waters. Completion of a limited examination is also required.

(c) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of 12 months of service on sail or auxiliary sail vessels. The required 12 months of service may have been obtained prior to issuance of the master's license.

(d) In addition to any required examination, the applicant must comply with the requirements listed in § 10.401(g).

**§ 10.426 Service requirements for master of near coastal steam or motor vessels of not more than 200 gross tons.**

(a) An applicant for a license as master of near coastal steam or motor vessels of not more than 200 gross tons must have one year of service on ocean or near coastal waters as a licensed mate or equivalent supervisory position on steam or motor, sail, or auxiliary sail vessels, while holding a license as mate

of ocean or near coastal vessels. Service on inland waters may substitute for a maximum of six of the required 12 months.

(b) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of 12 months of service on sail or auxiliary sail vessels. The required 12 months of service may have been obtained prior to issuance of the master's license.

**§ 10.428 Service requirements for mate of near coastal steam or motor vessels of not more than 200 gross tons.**

(a) The minimum service required to qualify an applicant for license as mate of near coastal steam or motor vessels of not more than 200 gross tons is:

(1) Twelve months of service in the deck department of steam or motor, sail, or auxiliary sail vessels operating on ocean or near coastal waters (service on inland waters may be submitted for a maximum of six of the required 12 months); or,

(2) Three months of service in the deck department of steam or motor vessels operating on ocean, near coastal or inland waters while holding a license as master of inland steam or motor, sail or auxiliary sail propelled vessels of not more than 200 gross tons.

(b) The holder of a license as operator of uninspected passenger vessels with a near coastal route endorsement may obtain this license by completing a limited examination.

(c) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of six months of deck service on sail or auxiliary sail vessels.

(d) A license as master of near coastal steam or motor vessels may be endorsed as mate of sail or auxiliary sail vessels upon presentation of three months of service on sail or auxiliary sail vessels.

(e) In order to obtain a tonnage endorsement of over 100 gross tons, the applicant must complete the additional examination topics indicated in Subpart I of this part.

**§ 10.429 Service requirements for master of near coastal steam or motor vessels of not more than 100 gross tons.**

(a) An applicant for a license as master of near coastal steam or motor vessel of not more than 100 gross tons must have two years of deck service on ocean or near coastal routes.

(b) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of 12 months of service on sail or auxiliary sail vessels. The required 12



months of service may have been obtained prior to issuance of the license.

**§ 10.430 Licenses for the Great Lakes and inland waters.**

Any license issued for service on the Great Lakes and inland waters is valid on all of the inland waters of the United States as defined in this Part. Any license issued for service on inland waters is valid for the inland waters of the United States, excluding the Great Lakes. As these licenses authorize service on waters seaward of the International Regulations for Preventing Collisions at Sea (COLREGS) demarcation line as defined in 33 CFR Part 80, the applicant must complete an examination on the COLREGS or the license must be endorsed with an exclusion from such waters.

**§ 10.431 Tonnage requirements for Great Lakes and inland licenses for vessels of over 1600 gross tons.**

(a) All required experience for Great Lakes and inland unlimited licenses must be obtained on vessels of over 200 gross tons. At least one-half of the required experience must be obtained on vessels of 1600 gross tons or over.

(b) Tonnage limitations may be imposed on these licenses in accordance with § 10.402 (b) and (c).

**§ 10.433 Service requirements for master of Great Lakes and inland steam or motor vessels of any gross tons.**

The minimum service required to qualify an applicant for license as master of Great Lakes and inland steam or motor vessels of any gross tons is:

(a) One year of service as mate or first class pilot while acting in the capacity of first mate of Great Lakes steam or motor vessels of more than 1600 gross tons; or,

(b) Two years of service as master of inland (excluding the Great Lakes) steam or motor vessels of more than 1600 gross tons; or,

(c) One year of service upon Great Lakes waters while holding a license as mate or first class pilot of Great Lakes and inland steam or motor vessels of more than 1600 gross tons. A minimum of six months of this service must have been in the capacity of first mate. Service as second mate is accepted for the remainder on a two-for-one basis to a maximum of six months (12 months of service equals six months of creditable service).

**§ 10.435 Service requirements for master of inland steam or motor vessels of any gross tons.**

The minimum service required to qualify an applicant for license as master of inland (excluding the Great

Lakes) steam or motor vessels of any gross tons is:

(a) One year of service as first class pilot (of other than canal and small lakes routes) or mate of Great Lakes or inland steam or motor vessels of more than 1,600 gross tons; or,

(b) Two years of service as wheelsman or quartermaster while holding a mate/first class pilot license.

**§ 10.437 Service requirements for mate of Great Lakes and inland steam or motor vessels of any gross tons.**

(a) The minimum service required to qualify an applicant for license as mate of Great Lakes and inland steam or motor vessels of any gross tons is:

(1) Three years of service in the deck department of steam or motor vessels, at least three months of which must have been on vessels on inland waters and at least six months of which must have been as able seaman, inland mate, boatswain, wheelsman, quartermaster, or equivalent position;

(2) Graduation from the deck class of the Great Lakes Maritime Academy; or,

(3) While holding a license as master of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons, one year service as master on vessels of over 200 gross tons.

(b) Service gained in the engine department on vessels of appropriate tonnage may be creditable for up to six months of the service requirements under paragraph (a)(1) of this section.

**§ 10.440 Tonnage limitations and service requirements for licenses as master or mate of Great Lakes and inland vessels of not more than 1600 gross tons.**

(a) All required service for licenses as master or mate of Great Lakes and inland vessels of not over 1600 gross tons must be obtained on vessels of 50 gross tons or over. At least one-half of the required service must be obtained on vessels of 100 gross tons or over.

(b) No tonnage limitations are imposed between 200-1600 gross tons.

(c) Service gained in the engine department on vessels of appropriate tonnage may be creditable for up to 25 percent of the service requirements for mate.

**§ 10.442 Service requirements for master of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons.**

The minimum service required to qualify an applicant for license as master of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons is:

(a) One year of service as a licensed mate or equivalent supervisory position while holding a license as mate of Great

Lakes and inland steam or motor vessels of not more than 1600 gross tons; or,

(b) Six months of service as operator while holding a license as operator of uninspected towing vessels.

**§ 10.444 Service requirements for mate of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons.**

The minimum service required to qualify an applicant for license as mate of Great Lakes and inland steam or motor vessels of not more than 1600 gross tons is:

(a) Two years of service in the deck department of Great Lakes or inland steam or motor vessels, six months of which shall have been as able seaman, boatswain, or quartermaster, or equivalent; or,

(b) One year of service as master of steam or motor or auxiliary sail vessels of not more than 200 gross tons on vessels of 50 gross tons or over; or,

(c) Six months of service as a second class operator of uninspected towing vessels while holding such license.

**§ 10.450 Tonnage limitations and qualifying requirements for licenses as master or mate of Great Lakes and inland vessels of not more than 200 gross tons.**

(a) Except as noted in subparagraph (d), all licenses issued for master or mate of vessels of not more than 200 gross tons are issued in 50 ton increments based on the applicants qualifying experience in accordance with the provisions of § 10.422. See the tonnage and qualifying service discussion in § 10.422 for further clarification.

(b) Service gained in the engineroom on vessels of not more than 200 gross tons may be creditable for up to 25 percent of the deck service requirements for mate.

(c) When the service is obtained on vessels upon which licensed personnel are not required, the OCMI must be satisfied that the nature of this qualifying service (i.e., size of vessel, route, equipment, etc.) is a reasonable equivalent to the duties performed on vessels which are required to engage licensed individuals.

(d) When the qualifying service is obtained upon vessels of five gross tons or less, the license will be limited to vessels of not more than 25 gross tons.

**§ 10.452 Service requirements for master of Great Lakes and inland steam or motor vessels of not more than 200 gross tons.**

(a) An applicant for a license as master of Great Lakes and inland steam or motor vessels of not more than 200 gross tons must have six months of service as mate or equivalent



supervisory position on steam or motor, sail, or auxiliary sail vessels while holding a license as mate, operator or second class operator of uninspected towing vessels.

(b) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must have six months of service on sail or auxiliary sail vessels.

**§ 10.454 Service requirements for mate of Great Lakes and inland steam or motor vessels of not more than 200 gross tons.**

(a) The minimum service required to qualify an applicant for a license as mate of Great Lakes and inland steam or motor vessels of not more than 200 gross tons is six months of service in the deck department of steam or motor, sail, or auxiliary sail vessels.

(b) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of three months of service on sail or auxiliary sail vessels.

(c) A license as master of steam or motor vessels may be endorsed as mate of sail or auxiliary sail vessels upon presentation of three months service on sail or auxiliary sail vessels.

(d) The holder of a license as operator of uninspected passenger vessels upon inland waters may obtain an

endorsement as mate of Great Lakes and inland steam or motor vessels of not more than 200 gross tons upon successful completion of an examination on rules and regulations for small passenger vessels.

(e) In order to obtain a tonnage endorsement of over 100 gross tons, the applicant must complete the additional examination topics indicated in Subpart I of this part.

**§ 10.455 Service requirements for limited master of Great Lakes and inland steam or motor vessels of not more than 100 gross tons.**

Limited masters' licenses for vessels of not more than 100 gross tons upon Great Lakes and inland waters may be issued to applicants to be employed by organizations such as formal camps, educational institutions, yacht clubs, and marinas with reduced service requirements. A license issued under this paragraph is limited to the specific activity and the locality of the camp, yacht club or marina. In order to obtain this restricted license, an applicant must:

(a) Have four months of service in the operation of the type of vessel for which the license is requested; and,

(b) Satisfactorily complete a safe boating course approved by the National Association of State Boating Law

Administrators, or those public education courses conducted by the U.S. Power Squadron or the American National Red Cross, or a Coast Guard approved course; and,

(c) Pass a limited examination appropriate for the activity to be conducted and the route authorized.

**§ 10.456 Service requirements for master of inland steam or motor vessels of not more than 100 gross tons.**

(a) An applicant for a license as master of inland steam or motor vessels of not more than 100 gross tons must present one year of service on any waters. In order to raise the tonnage limitation over 100 gross tons, the examination topics indicated in Subpart I of this Part must be completed in addition to satisfying the experience requirements of Subpart 10.452(a).

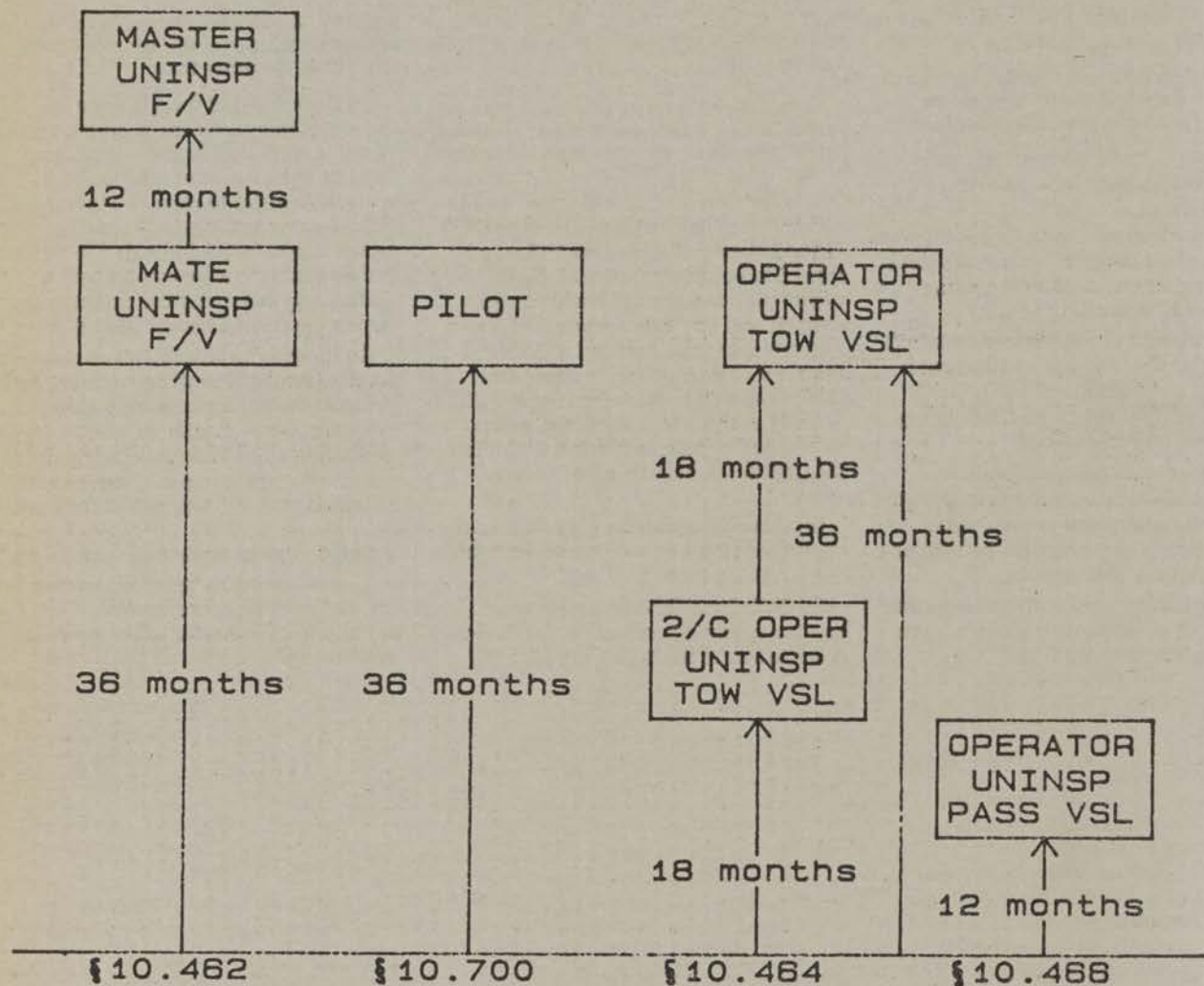
(b) In order to obtain an endorsement on this license for sail or auxiliary sail vessels, the applicant must submit evidence of six months of service on sail or auxiliary sail vessels. The required six months of service may have been obtained prior to issuance of the license.

**§ 10.460 Special deck license structure.**

The following diagram illustrates the special deck license structure. The section numbers refer to the specific requirements.



**Figure 10.460**  
**Special Deck License Structure**



**§ 10.462 Licenses for master or mate of uninspected fishing industry vessels.**

(a) This section applies to licenses for masters and mates of all vessels, however propelled, navigating the high seas, which are documented to engage in the fishing industry, with the exception of:

- (1) Wooden ships of primitive build;
  - (2) Unrigged vessels; and,
  - (3) Vessels of less than 200 gross tons.
- (b) Licenses as master and mate of uninspected fishing industry vessels are

issued for ocean waters with tonnage limitations in accordance with the provisions of § 10.402.

(c) For a license as master of uninspected fishing industry vessels, the applicant must have served four years at sea in the deck department. One year of this service must have been as a licensed mate or in an equivalent supervisory position.

(d) For a license as mate of uninspected fishing industry vessels, the applicant must have served three years

at sea in the deck department.

(e) Applicants may request an oral examination on the subjects listed in Subpart I of this Part.

**§ 10.464 Licenses for operator of uninspected towing vessels.**

(a) Licenses are issued as operator or second-class operator of uninspected towing vessels. These licenses do not authorize service aboard uninspected towing vessels on a foreign voyage nor on those of more than 200 gross tons in ocean or near coastal service.



(b) Licenses as operator and second-class operator of uninspected towing vessels are endorsed for operation on one or more of the following geographic areas:

- (1) Oceans (domestic trade) waters;
- (2) Near coastal waters;
- (3) Great Lakes and inland waters;
- (4) Western rivers; or,
- (5) A limited local area designated by the Officer in Charge, Marine Inspection.

(c) For a license as operator of uninspected towing vessels, an applicant must have one of the following:

- (1) Three years of service including the following:

(i) Two years on deck of a vessel of 26 feet or over in length;

(ii) One year on deck on a towing vessel, with at least six months of training or duty in the wheelhouse of the towing vessel; and,

(iii) Three months of service in each particular geographic area for which application is made; or,

(2) Three years of service on towing vessels including the following:

(i) one year on deck, with at least six months of training or duty in the wheelhouse of the towing vessel; and,

(ii) Three months of service in each particular geographic area for which application is made; or,

(3) For a license endorsed for a limited local area, 18 months service on deck on a towing vessel within the local area, including at least three months of training or duty in the Wheelhouse of the towing vessel.

(d) For a license as second-class operator of uninspected towing vessels, an applicant must have:

(1) At least 18 months of service on deck, including 12 months on towing vessels. The service must include at least three months of training or duty in the wheelhouse of towing vessels and three months of service in each particular geographic area for which endorsement for the license is requested; or,

(2) At least six months of service on towing vessels while holding a merchant mariner's document endorsed as "able seaman unlimited, able seaman limited, or able seaman special." The service must include three months in each particular geographic area for which an endorsement is requested, and either two months of training or duty in the wheelhouse or one month training or duty in the wheelhouse combined with successful completion of a towboat operator course of training approved by the Commandant under Subpart C.

(e) In order to obtain an operator or second-class operator license for ocean

(domestic trade) waters, the applicant must complete the following training and examination requirements:

- (1) approved firefighting course;
- (2) approved radar observer course; and,

(3) qualification as able seaman unlimited, able seaman limited, able seaman special, or able seaman offshore supply vessels.

(f) The examination for a license as operator of uninspected towing vessels endorsed for a local limited area is modified by deleting inappropriate questions.

(g) A person holding a license as second-class operator of uninspected towing vessels who is 21 years old and possesses the service required in paragraph (c) of this section may be issued a license as operator without further examination.

(h) A person holding a license as operator of uninspected towing vessels may have that license endorsed as second-class operator for a geographic area on which he or she has no operating experience, upon passing an examination for that area. Upon completion of three months of experience in that geographic area, the second-class restriction may be removed.

(i) An applicant for a license as operator or second-class operator of uninspected towing vessels who intends to serve only in the vicinity of Puerto Rico, and who speaks Spanish only, may be issued a license restricted to the navigable waters of the United States in the vicinity of Puerto Rico.

#### § 10.466 Licenses for operators of uninspected passenger vessels.

(a) This section applies to all applicants for the license to operate a vessel of less than 100 gross tons, equipped with propulsion machinery of any type, carrying six or less passengers.

(b) Operator of uninspected passenger vessels licenses issued for ocean waters will be limited to near coastal waters not more than 100 miles offshore.

Licenses issued for inland waters will include all inland waters, except Great Lakes. Licenses may be issued for a particular local area under paragraph (f) of this section.

(c) For a license as operator of an uninspected passenger vessel with an inland endorsement, an applicant must have a minimum of 12 months experience in the operation of vessels.

(d) For a license as operator of an uninspected passenger vessel with a near coastal endorsement, an applicant must have a minimum of 12 months experience in the operation of vessels,

including at least three months service on vessels operating on ocean or near coastal waters.

(e) An operator of uninspected passenger vessels license, limited on its face to undocumented vessels, may be issued to a person who is not a citizen of the United States.

(f) Limited operator of uninspected passenger vessel licenses may be issued to applicants to be employed by organizations such as formal camps, yacht clubs, educational institutions, and marinas. A license issued under this paragraph will be limited to the specific activity and the locality of the camp, yacht club, or marina. In order to obtain this restricted license, an applicant must:

(1) Have three months service in the operation of the type of vessel for which the license is requested; and,

(2) Satisfactorily complete a safe boating course approved by the National Association of State Boating Law Administrators, or those public education courses conducted by the U.S. Power Squadron or the American National Red Cross or a Coast Guard approved course; and,

(3) Pass a limited examination appropriate for the activity to be conducted and the route authorized.

(g) An applicant for a license as operator of uninspected passenger vessels who intends to serve only in the vicinity of Puerto Rico, and who speaks Spanish only, may be issued a license restricted to the navigable waters of the United States in the vicinity of Puerto Rico.

#### § 10.468 Licenses for mobile offshore drilling units [Reserved].

#### § 10.470 Mobile offshore drilling unit (MODU) license structure [Reserved].

#### § 10.480 Radar observer.

(a) This section contains the requirements that must be met to qualify as radar observer. Part 15 of this chapter specifies the persons who must be qualified as a radar observer.

(b) If an applicant meets the requirements in this section, one of the following radar observer endorsements will be added to a deck officer's license:

(1) Radar Observer (Unlimited).

(2) Radar Observer (Inland Waters).

(c) Endorsement as Radar Observer (Inland Waters) is valid only for those waters covered by the Inland Navigational Rules, other than the Great Lakes.

(d) Endorsement as Radar Observer (Unlimited) is valid on all waters. Except as provided in paragraphs (f) and (g) of this section, each applicant for



renewal of an endorsement must complete the appropriate course and receive the appropriate certificate of training from an approved radar training school.

(e) Each applicant for a radar observer endorsement or for renewal of an endorsement must present an approved course completion certificate to the Officer in Charge, Marine Inspection.

(f) Applicants who possess a radar observer endorsement and reside in remote geographic areas and are able to substantiate to the satisfaction of Officer in Charge of Marine Inspection, that their absence would disrupt normal movement of commerce, or that they are unable to attend an approved radar observer renewal course, may have their endorsement renewed upon successful completion of a written examination, administered by the Coast Guard.

(g) An endorsement as radar observer issued under this section is valid for five-years after the month of issuance of the certificate of training from an approved radar training school. The radar observer endorsement is not terminated by the issuance of a new license during this five year period.

(h) The month and year of the expiration of the radar observer endorsement is placed on the license.

(i) A radar observer endorsement may be renewed at any time.

(j) An applicant for renewal of a license that does not have a radar observer endorsement may renew the license without meeting the requirements for a radar observer endorsement.

(k) An applicant who does not have a radar observer endorsement may have a license raised to a higher grade or increased in scope without meeting the requirements for a radar observer endorsement.

#### Subpart E—Professional Requirements for Engineer Officers' Licenses

##### § 10.501 Grade and type of engineer licenses issued.

(a) Licenses are issued in the grades of:

- (1) Chief engineer;
- (2) First assistant engineer;
- (3) Second assistant engineer;
- (4) Third assistant engineer;
- (5) Chief engineer (limited);
- (6) Assistant engineer (limited);
- (7) Designated duty engineer;
- (8) Chief engineer uninspected fishing industry vessels; and,
- (9) Assistant engineer uninspected fishing industry vessels.

(b) Engineer licenses issued in the grades of chief engineer (limited) and assistant engineer (limited) of steam and/or motor vessels allow the holder to serve within any horsepower limitations on vessels of any gross tons on inland waters (other than the Great Lakes) and of not more than 1,600 gross tons in ocean or near coastal service in the following manner:

(1) Assistant engineer (limited—oceans) may serve on ocean waters;

(2) Chief engineer (limited—near coastal) may serve on near coastal waters; and,

(3) Chief engineer (limited-oceans) may serve on ocean waters.

(c) Engineer licenses issued in the grades of designated duty engineer of steam and/or motor vessels allow the holder to serve within stated horsepower limitations on vessels of not more than 500 gross tons in the following manner:

(1) Designated duty engineers limited to vessels of not more than 1000 horsepower or 4000 horsepower may serve only on near coastal or inland waters;

(2) Designated duty engineers with no horsepower limitations may serve on any waters.

(d) Engineer licenses are endorsed to authorize service on either steam or motor vessels or may be endorsed for both modes of propulsion.

(e) A person holding an engineer license which is restricted to near coastal waters may serve within the limitations of the license upon near coastal, Great Lakes, and inland waters.

##### § 10.502 Additional requirements for engineer licenses.

(a) For all original and raise of grade of engineer licenses, at least one-third of the minimum service requirements must have been obtained on the particular mode of propulsion for which applied.

(b) If a licensed applicant desires to obtain an endorsement on an engineer license in the other propulsion mode (steam or motor), the following alternative methods are acceptable:

(1) Four months of service as an observer in the same licensed capacity on vessels of the other propulsion mode;

(2) Four months of service as a licensed officer at a lower license level on vessels of the other propulsion mode;

(3) Six months of service as oiler, watertender, or junior engineer on vessels of the other propulsion mode; or,

(4) Completion of a Coast Guard approved training course for this endorsement.

##### § 10.503 Horsepower limitations.

(a) Engineer licenses of all grades and types may be subject to horsepower limitations. Other than as provided in § 10.524 for the designated duty engineer license, the horsepower limitation placed on a license is based on the applicant's qualifying experience considering the total shaft horsepower of each vessel on which the applicant has served.

(b) When an applicant for an original or raise of grade of an engineer license, other than a designated duty engineer license, has not obtained at least 50 percent of the required qualifying experience on vessels of 4,000 or more horsepower, a horsepower limitation is placed on the license based on the applicant's qualifying experience. The license is limited to the maximum horsepower on which at least 25 percent of the required experience was obtained, or 150 percent of the maximum horsepower on which at least 50 percent of the service was obtained, whichever is higher. Limitations are in multiples of 1000 horsepower, using the next higher figure when an intermediate horsepower is calculated. When the limitation as calculated equals or exceeds 10,000 horsepower, an unlimited horsepower license is issued.

(c) The following service on vessels of 4,000 horsepower or over will be considered qualifying for the raising or removing of horsepower limitations placed on engineer licenses:

(1) Six months of service in the highest grade licensed: removal of all horsepower limitations.

(2) Six months of service in any licensed capacity other than the highest grade for which licensed: Removal of all horsepower limitations for the grade in which service is performed and raise the next higher grade license to the horsepower of the vessel on which service was performed. The total cumulative service before and after issuance of the limited license may be considered in removing all horsepower limitations.

(3) Twelve months of service as oiler or junior engineer while holding a license as third assistant engineer or assistant engineer (limited-oceans): removal of all horsepower limitations on third assistant engineer or assistant engineer's (limited-oceans) license.

(4) Six months of service as oiler or junior engineer while holding a license as second assistant engineer: removal of all horsepower limitations on third assistant engineer's license.

(d) Raising or removing horsepower limitations based on service required by paragraph (c) of this section may be



granted without further written examination providing the Officer in Charge, Marine Inspection who issued the applicant's license, considers further examination unnecessary.

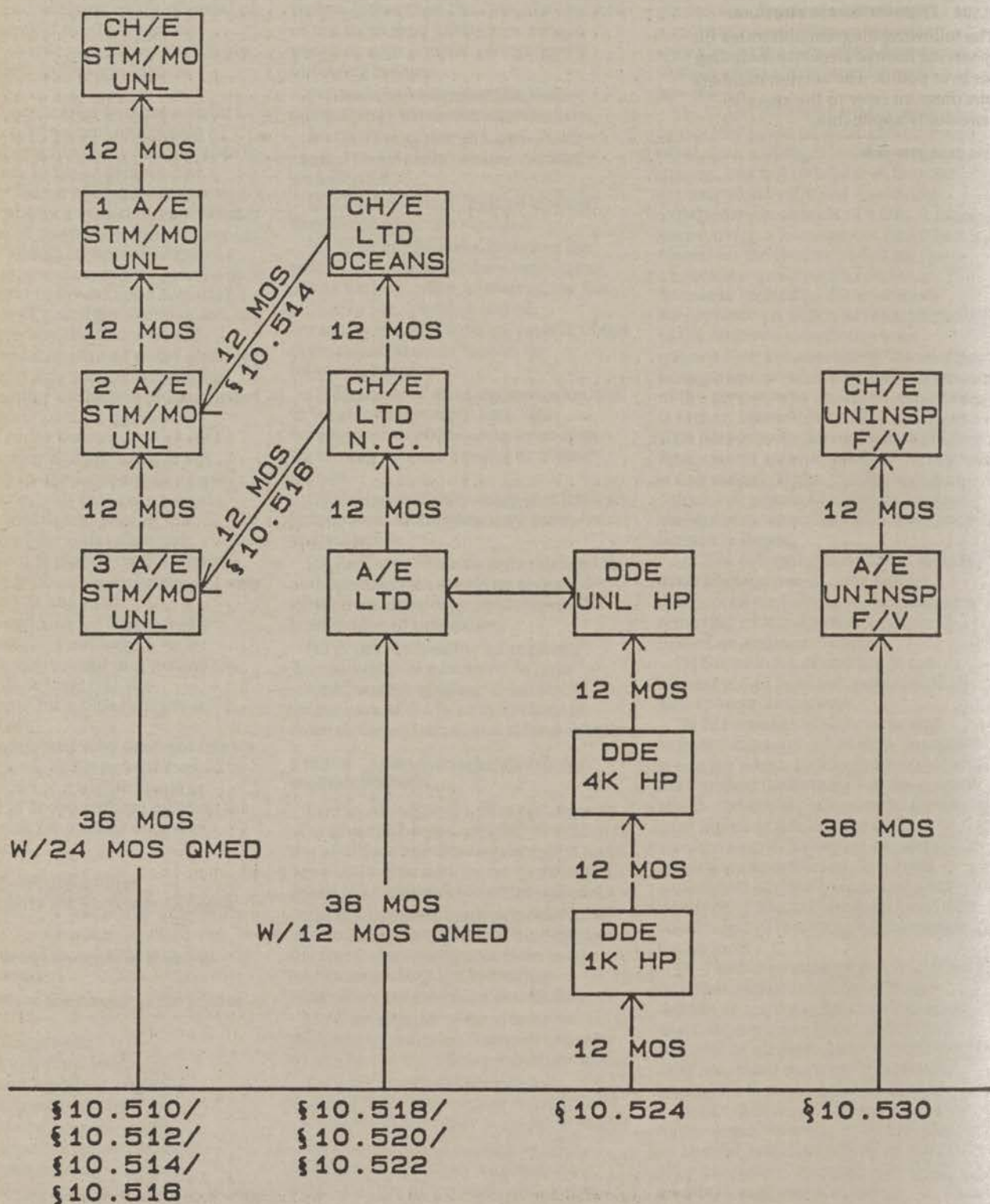
**§ 10.504 Engineer license structure.**

The following diagram illustrates the engineering license structure including cross over points. The section numbers on the diagram refer to the specific requirements applicable.

BILLING CODE 4910-14-M



Figure 10.504 Engineer License Structure





**§ 10.510 Service requirements for chief engineer of steam and/or motor vessels.**

The minimum service required to qualify an applicant for license as chief engineer of steam and/or motor vessels is:

- (a) One year of service as first assistant engineer; or,
- (b) One year of service while holding a license as first assistant engineer. A minimum of six months of this service must have been as first assistant engineer. Service as an assistant engineer is accepted on a two-for-one basis to a maximum of six months (12 months of service as a second or third assistant engineer equals six months of creditable service).

**§ 10.512 Service requirements for first assistant engineer of steam and/or motor vessels.**

The minimum service required to qualify an applicant for license as first assistant engineer of steam and/or motor vessels is one year of service as an assistant engineer, while holding a license as second assistant engineer.

**§ 10.514 Service requirements for second assistant engineer of steam and/or motor vessels.**

The minimum service required to qualify an applicant for license as second assistant engineer of steam and/or motor vessels is:

- (a) One year of service as an assistant engineer, while holding a license as third assistant engineer; or,
- (b) One year of service while holding a license as third assistant engineer which includes:
  - (1) A minimum of six months of service as third assistant engineer; and,
  - (2) Additional service as a qualified member of the engine department, calculated on a two-for-one basis; or,
  - (c) One year of service as chief engineer (limited-oceans) of steam or motor vessels, and completing the appropriate examination described in Subpart I of this part.

**§ 10.516 Service requirements for third assistant engineer of steam and/or motor vessels.**

(a) The minimum service required to qualify an applicant for license as third assistant engineer of steam and/or motor vessels is:

- (1) Three years of service in the engineroom of vessels, two years of which must have been as a qualified member of the engine department;
- (2) Three years of service as an apprentice to the machinist trade engaged in the construction or repair of marine, locomotive, or stationary engines, together with one year service in the engineroom as oiler, watertender, or junior engineer;
- (3) Graduation from:

- (i) The U.S. Merchant Marine Academy (engineering curriculum);
- (ii) The U.S. Coast Guard Academy and completion of an on-board engineer officer qualification program required by the service;
- (iii) The U.S. Naval Academy and completion of an on-board engineer officer qualification program required by the service;
- (iv) The engineering class of a Maritime Academy approved by and conducted under the rules prescribed by the Maritime Administrator and listed in Part 310 of this Title;

(4) Graduation from the marine engineering course of a school of technology accredited by the Accreditation Board for Engineering and Technology, together with three months of service in the engine department of steam or motor vessels;

(5) Graduation from the mechanical or electrical engineering course of a school of technology accredited by the Accreditation Board for Engineering and Technology, together with six months of service in the engine department of steam or motor vessels;

(6) Satisfactory completion of a three-year apprentice engineers training program approved by the Commandant; or,

(7) One year of service as chief engineer (limited-near coastal) of steam or motor vessels and completing the appropriate examination described in Subpart I of this Part.

(b) Experience gained in the deck department on vessels of 100 gross tons or over can be credited for up to three months of the service requirements under paragraph (a)(1) of this section.

**§ 10.518 Service requirements for chief engineer (limited-oceans) of steam and/or motor vessels.**

The minimum service required to qualify an applicant for license as chief engineer (limited-oceans) of steam and/or motor vessels is five years total service in the engineroom of vessels. Two years of this service must have been as a licensed engineer. Thirty months of the service must have been as a qualified member of the engine department or equivalent supervisory position.

**§ 10.520 Service requirements for chief engineer (limited-near coastal) of steam and/or motor vessels.**

The minimum service required to qualify an applicant for license as chief engineer (limited-near coastal) of steam and/or motor vessels is four years total service in the engineroom of vessels. One year of this service must have been as a licensed engineer. Two years of the

service must have been as a qualified member of the engine department or equivalent supervisory position.

**§ 10.522 Service requirements for assistant engineer (limited-oceans) of steam and/or motor vessels.**

The minimum service required to qualify an applicant for license as assistant engineer (limited-oceans) of steam and/or motor vessels is three years of service in the engineroom of vessels. Eighteen months of this service must have been as a qualified member of the engine department or equivalent supervisory position.

**§ 10.524 Service requirements for designated duty engineer of steam and/or motor vessels.**

(a) Designated duty engineer licenses are issued in three levels of horsepower limitations dependent upon the total service of the applicant and completion of appropriate examination. These licenses are limited to vessels of not more than 500 gross tons on certain waters as specified in § 10.501.

(b) The service requirements for licenses as designated duty engineer are:

(1) For designated duty engineer of steam and/or motor vessels of any horsepower, the applicant must have three years of service in the engineroom. Eighteen months of this service must have been as a qualified member of the engine department or equivalent supervisory position.

(2) For designated duty engineer of steam and/or motor vessels of not more than 4,000 horsepower, the applicant must have two years of service in the engineroom. One year of this service must have been as a qualified member of the engine department or equivalent supervisory position.

(3) For designated duty engineer of steam and/or motor vessels of not more than 1,000 horsepower, the applicant must have one year of service in the engineroom. Six months of this service must have been as a qualified member of the engine department or equivalent supervisory position.

**§ 10.530 Licenses for engineers of uninspected fishing industry vessels.**

(a) This section applies to licenses for chief and assistant engineers of all vessels, however propelled, navigating the high seas, which are documented to engage in the fishing industry, with the exception of:

- (1) Wooden ships of primitive build;
- (2) Unrigged vessels; and,
- (3) Vessels of less than 200 gross tons.

(b) Licenses as chief engineer and assistant engineer of uninspected fishing industry vessels are issued for ocean waters and with horsepower limitations in accordance with the provisions of § 10.503.



(c) For a license as chief engineer, the applicant must have served four years in the engineroom of vessels. One year of this service must have been as a licensed assistant engineer or equivalent supervisory position.

(d) For a license as assistant engineer, an applicant must have served three years in the engineroom of vessels.

(e) Two-thirds of the service required under this section must have been on motor vessels.

(f) Applicants may request an orally assisted examination on the subjects listed in Subpart I of this Part.

#### § 10.540 Licenses for mobile offshore drilling units (MODUs) [Reserved].

### Subpart F—Licensing of Radio Officers

#### § 10.601 Applicability.

This subpart provides for the licensing of radio officers for employment on vessels.

#### § 10.603 Requirements for radio officer licenses.

(a) Each applicant for an original license or renewal of license shall present a current first or second class radiotelegraph operator license issued by the Federal Communications Commission. The applicant shall enter on the license application form the number, class, and date of issuance of his or her Federal Communications Commission license.

(b) An applicant for license as radio officer shall apply for a merchant mariner's document under Part 12. This document will be endorsed "See License as Radio Officer."

(c) The application must also include a completed form CG-2765 "Coast Guard Intelligence Agency Check Request".

### Subpart G—Professional Requirements for Pilots' Licenses [Reserved]

### Subpart H—Registration of Staff Officers

#### § 10.801 Applicability.

This Subpart provides for the registration of staff officers for employment on vessels documented or numbered under the laws of the United States. Staff officers must be registered if serving on most vessels in ocean service or on the Great Lakes.

#### § 10.803 Grades of certificates issued.

Staff officers are registered in the following grades:

- (a) Chief purser.
- (b) Purser.
- (c) Senior assistant purser.

- (d) Junior assistant purser.
- (e) Medical doctor.
- (f) Professional nurse.

#### § 10.805 General requirements.

(a) The applicant for a certificate of registry as staff officer is not required to take any examination; however, the applicant shall present to the Officer in Charge, Marine Inspection a letter justifying the need for the certificate of registry.

(b) The applicant must hold or apply for a merchant mariner's document.

(c) Endorsements for a higher grade are not made on certificates of registry. An applicant for a higher grade in the staff department shall apply in the same manner as for an original certificate of registry and shall surrender the certificate upon issuance of the new certificate of registry. A person holding a certificate of registry as staff officer may serve in a lower grade of a service for which he or she is registered.

(d) Staff officers who are members of the Naval Reserve shall comply with Title 46 U.S.C. 8302 concerning uniforms.

(e) A duplicate certificate of registry may be issued by the Officer in Charge, Marine Inspection. (See § 10.219.)

#### § 10.807 Experience requirements for registry.

(a) The applicant for a certificate of registry as staff officer shall submit evidence of experience as follows:

(1) *Chief purser.* Two years of service aboard vessels performing duties relating to work in the purser's office.

(2) *Purser.* One year of service aboard vessels performing duties relating to work in the purser's office.

(3) *Senior assistant purser.* Six months of service aboard vessels performing duties relating to work in purser's office.

(4) *Junior assistant purser.* Previous experience not required.

(5) *Medical doctor.* A valid license as physician or surgeon issued under the authority of a state or territory of the United States, the Commonwealth of Puerto Rico, or the District of Columbia.

(6) *Professional nurse.* A valid license as a registered nurse issued under authority of a state or territory of the United States, the Commonwealth of Puerto Rico, or the District of Columbia.

(b) Employment on shore in connection with ship's business may be accepted in lieu of service aboard vessels. Related shore employment is accepted in the ratio of two months of shore service to count as one month of service aboard vessels.

(c) In computing the length of service required of an applicant for a certificate of registry, service of one season on

vessels on the Great Lakes is counted as service of one year.

(d) In the event an applicant for a certificate of registry, other than medical doctor or professional nurse, presents evidence of other qualifications which, in the opinion of the Officer in Charge, Marine Inspection, is equivalent to the experience requirements of this section and is consistent with the duties of a staff officer, the Officer in Charge, Marine Inspection may issue the certificate of registry.

#### § 10.809 Experience requirements for ratings endorsed on certificate of registry.

An applicant for rating to be endorsed on a certificate of registry shall submit evidence of experience as follows:

(a) *Marine physician assistant.* Successful completion of an accredited course of instruction for a physician's assistant or nurse practitioner program.

(b) *Hospital corpsman.* A rating of at least hospital corpsman or health services technician, first class in the U.S. Navy, U.S. Coast Guard, U.S. Marine Corps, or an equivalent rating in the U.S. Army (not less than staff sergeant, Medical Department, U.S.A.), or in the U.S. Air Force (not less than technical sergeant, Medical Department, U.S.A.F.), and a period of satisfactory service of at least one month in a military hospital or U.S. Public Health Service Hospital.

### Subpart I—License Examination Subjects

#### § 10.901 General provisions.

(a) Applicants for the licenses listed in this Subpart must pass an examination on the subjects listed prior to issuance of a license. For all deck and engineering licenses, the examination must be written, except where indicated in § 10.205(i)(1) of this part.

(b) If the license is to be limited in a manner which would render any of the subject matter unnecessary or inappropriate, the examination may be amended accordingly by the Officer in Charge, Marine Inspection. Limitations which may affect the examination content are:

(1) Restricted routes for reduced service licenses (master or mate of vessels of not more than 200 gross tons, operator of uninspected passenger vessels or uninspected towing vessels); or,

(2) Engineer licenses with horsepower restrictions.

(c) Examinations are required within each license category at entry and command levels with the exception of master of near coastal vessels of not



more than 200 gross tons, master of Great Lakes and inland vessels of not more than 200 gross tons, and operator of uninspected towing vessels when the examination was taken at the entry level.

**§ 10.903 Licenses requiring examinations.**

(a) The following licenses require examinations for issuance:

- (1) Master ocean any gross tons;
- (2) Master near coastal any gross tons;<sup>1</sup>
- (3) Chief mate ocean any gross tons;
- (4) Chief mate near coastal any gross tons;<sup>1</sup>
- (5) Second mate ocean any gross tons;
- (6) Second mate near coastal any gross tons;<sup>1</sup>
- (7) Third mate ocean any gross tons;
- (8) Third mate near coastal any gross tons;<sup>1</sup>
- (9) Master ocean/near coastal not more than 500 or 1600 gross tons;
- (10) Mate ocean/near coastal not more than 500 or 1600 gross tons;
- (11) Mate near coastal not more than 200 gross tons;
- (12) Master Great Lakes and inland any gross tons;
- (13) Mate Great Lakes and inland any gross tons;
- (14) Master inland any gross tons;
- (15) Master Great Lakes and inland not more than 1600 gross tons;
- (16) Mate Great Lakes and inland not more than 1600 gross tons;
- (17) Mate Great Lakes and inland not more than 200 gross tons;
- (18) Pilot;
- (19) Operator or 2/c operator uninspected towing vessels;
- (20) Operator uninspected passenger vessels;
- (21) Master uninspected fishing industry vessels;
- (22) Mate uninspected fishing industry vessels;

<sup>1</sup> Examination will differ from oceans unlimited only by deleting those subjects inappropriate for this route.

(23) Chief engineer steam/motor vessels;

(24) First assistant engineer steam/motor vessels;

(25) Second assistant engineer steam/motor vessels;

(26) Third assistant engineer steam/motor vessels;

(27) Chief engineer (limited) steam/motor vessels;

(28) Assistant engineer (limited) steam/motor vessels;

(29) Designated duty engineer steam/motor vessels;

(30) Chief engineer uninspected fishing industry vessels;

(31) Assistant engineer uninspected fishing industry vessels.

(b) The following licenses do not require examinations:

(1) Master ocean or near coastal not more than 200 gross tons, when raising license grade from mate near coastal not more than 200 gross tons. Master ocean not more than 200 gross tons would, however, require an examination in celestial navigation.

(2) Master Great Lakes and inland not more than 200 gross tons, when raising license grade from mate Great Lakes and inland not more than 200 gross tons.

(3) Operator of uninspected towing vessels, when raising license grade from second class operator of uninspected towing vessels (endorsed for same route).

**§ 10.905 Examination reference information.**

The examinations required under this Subpart are based on international agreements, statutes, regulations, and standard reference materials. Applicants should be familiar with the content and use of the following, to the extent they relate to the particular license sought:

(a) International Regulations for Preventing Collisions at Sea, 1972 (72 COLREGS);

(b) Inland Navigational Rules;

(c) "Basic Principles to be Observed in Keeping a Navigational/Engineering Watch" (Regulation II/1 and III/1 of The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978;

(d) International Medical Guide for Ships;

(e) Safety of Life at Sea, 1974 (SOLAS);

(f) Merchant Ship Search and Rescue Manual (MERSAR);

(g) International Code of Signals;

(h) International Regulations for Carriage of Goods;

(i) Titles 33, 46 and 49 of the Code of Federal Regulations;

(j) Light List;

(k) List of Lights;

(l) Radio Navigational Aids;

(m) Coast Pilot;

(n) Sailing Directions;

(o) Tide Tables;

(p) Tidal Current Tables;

(q) Nautical Almanac;

(r) Tables of Computed Altitude and Azimuth (Volume III)—Pub. 214;

(s) Sight Reduction Tables for Marine Navigation (Volume II)—Pub. 229;

(t) American Practical Navigator (Volume II)—Pub. 9;

(u) Commandant Instruction M16616.6 (old CG-388) Chemical Data Guide for Bulk Shipment by Water;

(v) Ship's Code Card.

**§ 10.910 Subjects for deck licenses.**

Table 10.910-1 gives the codes used in table 10.910-2 for all deck licenses. Table 10.910-2 indicates the examination subjects for each license, by code number. Figures in the body of the table, in place of the letter "x", refer to notes.

TABLE 10.910-1 Codes for Deck Licenses

[Deck Licenses]

1. Master, oceans, any gross tons	12. Mate, near coastal, 500/1600 gross tons
2. Master, near coastal, any gross tons	13. Master, oceans, 200 gross tons
3. Chief mate, oceans, any gross tons	14. Master or mate, near coastal, 200 gross tons (includes master, near coastal, 100 gross tons)
4. Chief mate, near coastal, any gross tons	15. Operator, uninspected passenger vessels, near coastal
5. Master, oceans, 500/1600 gross tons	16. Operator, uninspected passenger vessels, inland
6. Master, near coastal, 500/1600 gross tons	17. Operator, uninspected towing vessels, oceans (domestic trade)
7. Second mate, oceans, any gross tons	18. Operator, uninspected towing vessels, near coastal
8. Second mate, near coastal, any gross tons	19. Operator, uninspected towing vessels, great lakes/inland
9. Third mate, oceans, any gross tons	20. Operator, uninspected towing vessels, western rivers
10. Third mate, near coastal, any gross tons	21. Master, great lakes/inland, or master, inland, any gross tons
11. Mate, oceans, 500/1600 gross tons	22. Mate, great lakes/inland, any gross tons



[Deck Licenses]

- |  |  |
|--|--|
| 23. Master, great lakes/inland, 1600 gross tons  | 26. Master, uninspected fishing industry vessels |
| 24. Mate, great lakes/inland, 1600 gross tons  | 27. Mate, uninspected fishing industry vessels   |
| 25. Master or mate, great lakes/inland, 200 gross tons (includes master, inland, 100 gross tons) | 28. Pilot  |

TABLE 10.910-2 SUBJECTS FOR DECK LICENSES

Examination Topics	License codes (Table 10.910-1)																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
NAVIGATION AND POSITION DETERMINATION																												
Ocean Track Plotting:																												
Middle latitude sailing	X		X		X		X		X																			
Mercator sailing	X	X	X	X	X		X		X																			
Great circle sailing	X		X				X																					
Parallel sailing	X		X				X		X																			
ETA	X	X	X	X	X		X	X	X	X	X																	
Dead reckoning			X		X		X	X	X	X	X		X					X	X								X	X
Restricted waters navigation:																												
Piloting			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chart navigation			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Ice navigation	X	X	X	X	X	X					X																X	X
Restricted visibility navigation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Traffic separation schemes			X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X									
Extensive tidal effects	X	X	X	X	X	X												X	X									
Speed by RPM	X	X	X	X	X	X	X	X																				
Fuel conservation	X	X	X	X	X	X																						
Celestial observations including:																												
Special cases	X																											
Latitude by Polaris	X		X		X		X				X							X										
Latitude by Meridian transit	X																											
Latitude by Meridian transit for Sun only		X	X	X	X		X	X	X	X	X		X					X								X	X	
Fix or running fix (any body)	X	X	X	X	X		X	X	X	X	X		X					X								X	X	
Star identification	X	X	X	X	X		X					X		X														
Time of Meridian transit	X																											
Time of Meridian transit for Sun only		X	X	X	X		X	X	X	X	X		X					X								X	X	
Second estimate Meridian transit	X																											
Zone time sun rise/set	X	X	X	X	X		X		X		X		X															
Zone time moon rise/set	X	X	X	X	X		X																					
Naut. astronomy & nav. definitions	X	X	X	X			X	X	X	X																		
Terrestrial observations:																												
Aids to navigation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Charts, nav. publications, & notices to mariners	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Piloting	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Distance off			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X			
Bearing problems			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X
Fix or running fix			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X
Electronic navigation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Instruments and accessories	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Change in draft due to density	X	X	X	X																								
Marlinspike seamanship & purchases							X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X
WATCHKEEPING																												
COLREGS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1	X	X	1		1	1	1	1	1	1	X	X
Inland Navigational Rules	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Basic Principles, Watchkeeping	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Navigation Safety Regs. (33 CFR 164)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RADAR EQUIPMENT																												
Radar Observer Certificate	X	X	X	X	X	X	X	X	X	X	X	X									X	X	X	X		X	X	X
COMPASS—MAGNETIC AND GYRO																												
Principles of magnetic & gyro compass	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2	2	X	X	2		X	X	X	X	2	X	X	
Magnetic compass compensation	X	X	X	X			X	X	X												X	X						
Magnetic & gyro compass error/corr	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	
Azimuth (any body)			X	X	X	X	X																					
Azimuth (Sun only)									X	X	X		X													X	X	
Amplitude (any body)	X	X						X																				
Amplitude (Sun only)			X	X	X		X	X	X	X		X																
Deviation table construction	X	X	X	X	X	X	X	X	X	X																		
Gyro controlled systems	X	X	X	X	X	X				X	X																	
Operation & care of main gyro systems	X	X	X	X	X	X				X	X																	
METEOROLOGY AND OCEANOGRAPHY																												
Synoptic chart weather forecasting			X	X	X	X	X	X																		X	X	X
Characteristics of weather systems			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Ocean current systems			X	X	X	X	X		X																	X	X	X



TABLE 10.910-2 SUBJECTS FOR DECK LICENSES—Continued

Examination Topics	License codes (Table 10.910-1)																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Tide and tidal current publications.....			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Tide & tidal current calculations .....			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
SHIP MANEUVERING AND HANDLING																												
Approaching pilot vessel or station .....	X	X	X	X	X	X					X	X										X	X	X	X	X	X	X
Shiphandling in rivers, estuaries .....	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X
Maneuvering in shallow water .....	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X
Interaction with bank/passing ship .....	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X
Berthing and unberthing .....	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X
Anchoring and mooring .....			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X
Dragging, clearing fouled anchors .....			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X
Drydocking, w & w/o prior damage .....			X	X	X	X																X	X	X	X	X	X	X
Hvy WX ops with ship/acft distress, tow .....			X	X	X	X							X	X	X	X										X	X	X
Maneuvering for launching of lifeboats and liferafts in heavy weather.....			X	X	X	X							X	X			X	X			X		X				X	X
Receiving survivors from lbfts/lfrfts .....			X	X	X	X							X	X			X	X	X		X						X	X
Gen. turn circle, pivot point, advance & transfer.....							X	X	X	X	X	X											X		X			
Det. man. char. major vessel types .....			X	X				X	X	X	X																	
Wake reduction .....			X	X	X	X									X	X						X	X	X	X		X	X
Ice operations .....			X	X	X	X											X	X	X	X	X		X					
Towing operations .....			X	X	X	X					X	X	X	X	X	X	X	X	X	X						X		
SHIP STABILITY, CONSTRUCTION, AND DAMAGE CONTROL																												
Principles of ship construction .....			X	X	X	X	X	X	X	X											X		X		X			
Trim and stability .....	X	X	X	X	X	X	X	X	X	X			X	X			X	X	X	X	X		X		X	X	X	
Damage trim & stability .....	X	X	X	X	X	X					X	X	3	3														
Stab., trim, and stress calculation .....	X	X	X	X	X	X	X	X					3	3														
Vessel structural members .....			X	X	X	X	X	X	X	X	X	3	3															
IMO ship stability recommendations .....	X	X	X																			X			X			
Damage control .....	X	X	X	X	X	X					X	3	3													X		
SHIP POWER PLANTS																												
Marine power plant op. principles .....			X	X	X	X						3	3								X		X		X			
Ship's auxiliary machinery .....			X	X	X																X		X					
Marine engineering terms .....			X	X	X							3	3								X		X		X			
Small engine operations & maint. ....												X	X	X	X											X		
CARGO HANDLING AND STOWAGE																												
Cargo stowage & security, including cargo gear .....	X	X	X	X	X	X	X	X	X	X	X	X	X								X	X	X	X	X			
Loading and discharge operations .....	X	X	X	X	X	X	X	X	X	X	X										X	X	X	X				
Inter. regs. (IMDG) for cargoes .....	X	X																			X	X	X	X				
Dangerous/hazardous cargo regulations .....	X	X	X	X	X	X	X	X	X	X	X										X		X					
Tank vessel safety .....	X	X	X	X	X	X	X	X	X	X	X										X		X					
Cargo piping and pumping systems .....	X	X	X	X	X	X	X	X	X	X	X										X		X					
Cargo oil terms and definitions .....	X	X	X	X	X	X	X	X	X	X	X										X		X					
Ball., tank clean., & gas free ops .....	X	X	X	X	X	X	X	X	X	X	X										X							
Load on top procedures .....			X	X	X	X	X	X	X	X	X																	
Barge regulations (operations) .....																	X	X	X	X								
FIRE PREV. AND FIREFIGHTING APPLIANCES																												
Organization of fire drills .....	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X
Classes and chemistry of fire .....	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Firefighting systems .....	X	X	X	X	X	X	X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X
Firefighting equip. and regulations .....	X	X	X	X	X	X	X	X	X	X	X	3	3				X	X	X	X	X	X	X	X	X	3	X	X
Firefighting equip. and for T-boats .....												X	X								X	X	X	X	X			
Basic firefighting and prevention .....	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
EMERGENCY PROCEDURES																												
Ship beaching precautions .....	X	X	X	X																	X		X					
Actions prior to/after grounding .....	X	X	X	X																	X		X					
Refloating a grounded ship .....	X	X	X	X																	X		X					
Collision .....	X	X	X	X									X	X	X		X	X	X	X	X	X	X		X			
Temporary repairs .....	X	X	X	X	X	X							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Passenger/crew safety in emergency .....	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fire or explosion .....	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Abandon ship .....	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Emergency steering .....	X	X	X	X	X																X		X				X	X
Res. surv. from ships/airc. in dist. ....	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X
Man overboard .....	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MEDICAL CARE																												
Knowledge and use of—																												
Inter. Med. Guide for Ships .....	X	X	X	X																								
Ship Med. Chest & Med. Aid at Sea .....	X	X	X	X																								
Med. sec., Inter. Code of Signals .....	X	X	X	X	X	X	X	X	X																			</



TABLE 10.910-2 SUBJECTS FOR DECK LICENSES—Continued

Examination Topics	License codes (Table 10.910-1)																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
<b>MARITIME LAW</b>																												
International maritime law:																												
Certificates & documents required	X	X	X	X	X	X																						
Int'l convention on load lines	X	X	X	X	X	X																						
SOLAS	X	X	X	X	X								3	3														
MARPOL 73/78	X	X	X	X	X	X	X	X	X	X																		
International health regulations	X	X	X	X	X																							
Int'l inst. for ship/pass./crew/cargo safety	X	X	X	X	X	X																						
National maritime law:																												
Load lines	X	X	X	X	X	X					X	X	X	X			X	X	X							3		
Cert. & documentation of vessels	X	X	X	X	X	X							X	X	X	X	X	X	X	X	X		X		3	X		
Ship sanitation	X	X	X	X	X	X							X	X	X	X	X	X	X	X	X		X	X	X	X	X	
Rules and regs for vessel insp.	X	X	X	X	X	X							3	3								X	X	X	X	3		
Rules and regs for T-boat insp.													X	X														
Rules & regs for uninsp. vessels													X	X	X	X	X	X	X	X						X	X	
Pollution prevention regs.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X
COLREG responsibilities	X	X	X	X	X	X							3	3											3			
Pilotage	X	X	X	X	X	X							X	X									X					X
Licensing & certification of seaman	X	X			X	X							X	X	X	X	X	X	X	X	X		X			X	X	
Shipment & discharge, manning	X	X			X	X							X	X			X	X			X		X					
Title 46 U.S. Code	X	X	X	X	X	X															X		X					
Captain of the Port regulations, Vessel Traffic Service procedures for the route desired																												X
<b>PERSONNEL MANAGEMENT AND TRAINING</b>																												
Personnel management	X	X	X	X	X	X															X		X					
Shipboard organization	X	X	X	X	X	X															X		X					
Required crew training	X	X	X	X	X	X															X		X					
<b>SHIP'S BUSINESS</b>																												
<b>COMMUNICATIONS</b>																												
Practical signaling examination	X	X	X	X			X	X	X	X																		
Radiotelephone communications			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Radiotelegraphy emerg. dist. signals			X	X			X	X	X	X																		
Signals: storm/wreck/dist./special			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
International code of signals			X	X	X	X	X	X	X	X																		
<b>LIFESAVING</b>																												
Survival at sea			X	X	X	X	X	X	X	X																		
Lifesaving appliance regulations			X	X	X	X	X	X	X	X	X	3	3								X	X	X		3			
Lifesaving appliance operation for T-boats												X	X												X			
Lifesaving appliance operation			X	X	X	X	X	X	X	X	X	3	3								X	X	X	X	3	X	X	
Lifesaving appliance regulations for T-boats												X	X												X			
<b>SEARCH AND RESCUE</b>																												
IMO merch. ship SAR manual (MERSAR)	X	X	X	X	X	X																						
AMVER	X	X	X	X	4	4																						
Chart sketch, including recommended courses, distances, prominent aids to navigation, depths of waters in channels & over hazardous shoals, & other important features of the route, such as character of the bottom																												5
<b>SAIL/AUX. SAIL VESSELS ADDENDUM</b>																												
Sail vessel safety precautions, rules of the road, operations, heavy weather procedures, navigation, maneuvering, and Sailing terminology (6)																												
Any other subject the OCMI considers necessary to establish the applicant's proficiency	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

1—Take COLREGS if license not limited to non-COLREGS waters.

2—Magnetic only.

3—for licenses over 100 gross tons.

4—for licenses over 1,000 gross tons.

5—The OCMI may accept chart sketching of only a portion of the route for long or extended routes.

6—Applicants for sail/auxiliary sail endorsements to master, mate or operator of uninspected passenger vessels licenses are also tested in the subjects contained in this addendum.

## § 10.920 Subjects for mobile offshore drilling unit (MODU) licenses [Reserved].

## § 10.950 Subjects for engineer licenses.

TABLE 10.950 (SUBJECTS FOR ENGINEER LICENSES)

	C/ENG. UNL		1/A ENG. UNL		2/A ENG. UNL		3/A ENG. UNL		C/E LTD		A/E LTD & DDE UNL HP		C/E UNIN		A/E UNIN		DDE	
	STM	MTR	STM	MTR	STM	MTR	STM	MTR	STM	MTR	STM	MTR	MTR	F/V	MTR	F/V	STM	MTR
I Theoretical Knowledge																		
1. Thermodynamics.....	X	X	X	X	X	X	X	X										
2. Combustion Processes.....	X	X	X	X	X	X	X	X	X	X	X	X	X					
3. Heat Transmission.....	X	X	X	X	X	X	X	X	X	X	X	X	X					



TABLE 10.950 (SUBJECTS FOR ENGINEER LICENSES)—Continued

	C/ENG. UNL		1/A ENG. UNL		2/A ENG. UNL		3/A ENG. UNL		C/E LTD		A/E LTD & DDE UNL HP		C/E UNIN		A/E UNIN		DDE	
	STM	MTR	STM	MTR	STM	MTR	STM	MTR	STM	MTR	STM	MTR	MTR	F/V	MTR	F/V	STM	MTR
4. Mechanics & Hydromechanics.....	X	X	X	X	X	X	X	X	X	X	X	X						
5. Propulsion System Operating Prin.: Diesel.....		X		X		X		X		X		X			X			X
Steam.....	X		X		X		X		X		X						X	
6. Refrigeration.....	X	X	X	X	X	X	X	X	X	X	X	X						
7. Steering Gear.....	X	X	X	X	X	X	X	X	X	X	X	X						
8. Properties of Fuels and Lubricants.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
9. Technology/Properties of Materials.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
10. Fire and Extinguishing Agents.....	X	X	X	X	X	X	X	X	X	X	X	X						
11. Marine Electrotechnology.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
12. Marine Electronics.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
13. Marine Electrical Equipment.....	X	X	X	X	X	X	X	X	X	X	X	X						
14. Automation, Instrumentation and Control Systems.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
15. Naval Architecture.....	X	X	X	X	X	X	X	X	X	X	X	X						
16. Ship Construction.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
17. Damage Control.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
<b>II Practical Knowledge</b>																		
1. Operation/Maintenance: Diesel Plant.....		X		X		X		X		X		X			X			X
Steam Plant.....	X		X		X		X		X		X						X	
2. Operation/Maintenance of Auxiliary Machinery Including: Pumping/Piping Systems, Auxiliary Boiler Plant, Steering Gear Systems, Propellers and Shafting Systems, Auxiliary Diesel Plants, Sanitary/Sewage Systems, Fresh Water Systems, Distilling Systems, Lubrication Systems, Automation Systems, Control Systems, Cooling Systems, Ventilation Systems.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
3. Operation/Testing/Control of Electrical and Control Equipment.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
4. Operation/Maintenance of: Cargo Handling Equipment.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
Deck Machinery.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
5. Machinery Malfunction Detection and Action to Prevent Damage.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
6. Maintenance & Repair Procedures.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
7. Fire Prevention, Detection, and Extinction.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
8. Methods to Prevent Pollution by Vessels.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
9. Pollution Prevention Regulations.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
10. Effects of Marine Pollution on the Environment.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
11. First Aid/First Aid Equipment.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
12. Lifesaving Appliances.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
13. Damage Control including Engine Room Flooding.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
14. Safe Working Practices.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
<b>III Watchstanding</b>																		
1. Change of Watch.....	X	X	X	X	X	X	X	X	X	X	X	X						
2. Routine Watch Duties.....	X	X	X	X	X	X	X	X	X	X	X	X						
3. Machinery Log Book.....	X	X	X	X	X	X	X	X	X	X	X	X						
4. Main/Auxiliary Machinery Start Up Procedures.....	X	X	X	X	X	X	X	X	X	X	X	X					X	X
5. Boiler Operation.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
6. Boiler Water Levels.....	X	X	X	X	X	X	X	X	X	X	X	X					X	
7. Diesel Plant Operation.....	X	X	X	X	X	X	X	X	X	X	X	X						
8. Routine Pumping Operations.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
9. Bilge, Ballast, Cargo Pumping Systems.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
10. Generator/Alternator Synchronizing & Shifting.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
11. Watch Safety Precautions.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
12. Fire or Accident.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
13. Electrical Safety Precautions.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
<b>IV Miscellaneous</b>																		
1. Approved Fire Fighting Course.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X
2. International Rules and Regulations Regarding Machinery/Engineering.....	X	X	X	X	X	X	X	X	X	X	X	X			X			
3. U.S. Rules and Regulations Regarding Machinery/Engineering.....	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X



## SUBCHAPTER C—UNINSPECTED VESSELS

### PART 26—OPERATIONS [AMENDED]

#### Subpart 26.25—Crew Requirements [Removed]

4. By removing and reserving Subpart 26.25

## SUBCHAPTER D—TANK VESSELS

### PART 35—OPERATIONS [AMENDED]

#### §§ 35.05-5 and 35.05-10 [Removed and Reserved]

5. By removing and reserving §§ 35.05-5 and 35.05-10

## SUBCHAPTER P—MANNING OF VESSELS

### PART 157—MANNING REQUIREMENTS [REDESIGNATED AS PART 15]

6. Part 157 of 46 CFR Subchapter P is redesignated as Part 15, added to Subchapter B, and revised to read as follows:

## PART 15—MANNING REQUIREMENTS

### Subpart A—Purpose and Applicability

#### Sec.

- 15.101 Purpose of regulations.
- 15.103 General.

### Subpart B—Definition of Terms

- 15.301 Definition of terms used in this part.

### Subpart C—Manning Requirements; All Vessels

- 15.401 Employment and service within restrictions of license or document.
- 15.405 Familiarity with vessel characteristics.

### Subpart D—Manning Requirements; Inspected Vessels

- 15.501 Certificate of inspection.
- 15.505 Changes in the certificate of inspection.
- 15.510 Right of appeal.
- 15.515 Compliance with certificate of inspection.
- 15.520 Mobile offshore drilling units [Reserved].
- 15.525 Reference to other parts.

### Subpart E—Manning Requirements; Uninspected Vessels

- 15.601 General.
- 15.605 Licensed operators for uninspected passenger vessels.
- 15.610 Licensed operators for uninspected towing vessels.

### Subpart F—Limitations and Qualifying Factors

- 15.701 Officers' Competency Certificates Convention, 1936.

- 15.705 Watches.
- 15.710 Working hours.
- 15.715 Automated vessels.
- 15.720 Use of non-U.S. licensed and/or documented personnel.
- 15.725 Sailing short.
- 15.730 Language requirements.

### Subpart G—Computations

- 15.801 General.
- 15.805 Master.
- 15.810 Mates.
- 15.812 Pilots.
- 15.815 Radar observers.
- 15.820 Chief engineer.
- 15.825 Engineers.
- 15.830 Radio officers.
- 15.835 Staff officers.
- 15.840 Able seamen.
- 15.845 Lifeboatmen.
- 15.850 Lookouts.
- 15.855 Cabin watchmen and fire patrolmen.

### Subpart H—Equivalents

- 15.901 Licenses required on board inspected vessels of less than 100 gross tons.
- 15.905 Uninspected passenger vessels.
- 15.910 Uninspected towing vessels.
- 15.915 Engineer licenses.

Authority: 46 U.S.C. 2103, 3703, 8105, 8901, 8902, 8903, 8904, 9102; 50 U.S.C. 198; 49 CFR 1.46(b).

### Subpart A—Purpose and Applicability

#### § 15.101 Purpose of regulations.

The purpose of the regulations in this part is to set forth uniform minimum requirements for the manning of vessels. In general, they implement, interpret, or apply the specific statutory manning requirements in Title 46, United States Code, Parts E & F, implement various international conventions which affect merchant marine personnel, and provide the means for establishing the complement necessary for safe operation of vessels.

#### § 15.103 General.

(a) The regulations in this Part apply to all vessels which are subject to the manning requirements contained in the navigation and shipping laws of the United States, including uninspected vessels (46 U.S.C. 7101-9308).

(b) The navigation and shipping laws state that a vessel may not be operated unless certain manning requirements are met. In addition to establishing a minimum of licensed individuals and members of the crew to be carried on board certain vessels, they establish minimum qualifications concerning licenses, citizenship, and conditions of employment. It is the responsibility of the owner, charterer, managing operator, master, or person in charge or command of the vessel to ensure that appropriate personnel are carried to meet the requirements of the applicable

navigation and shipping laws and regulations.

(c) Inspected vessels are issued a certificate of inspection which indicates the minimum complement of licensed individuals and crew (including lifeboatmen) considered necessary for safe operation. The certificate of inspection complements the statutory requirements but does not supersede them.

### Subpart B—Definition of Terms

#### § 15.301 Definition of terms used in this part.

(a) The following terms defined in this subpart apply only to the manning of vessels subject to the manning provisions in the navigation and shipping laws of the United States:

"Deck crew (excluding licensed individuals)" means, as used in 46 U.S.C. 8702, only the following members of the deck department below the grade of licensed individual: Able seamen and ordinary seamen.

"Officer in Charge, Marine Inspection (OCMI)" for the purposes of Part 15 means any person designated as such by the Commandant and who under the Coast Guard District Commander is in charge of an inspection zone.

"Staff officer" means a person who holds a certificate of registry in the staff department such as a purser, a medical doctor or professional nurse, which is issued by the Coast Guard.

(b) The following categories of licensed individuals are established in Part 10 of this Chapter. When used in this Part, the following terms mean an individual holding a valid license to serve in that capacity issued under Part 10 of this chapter.

- (1) Master;
- (2) Mate;
- (3) Pilot;
- (4) Engineer;
- (5) Radio officer;
- (6) Operator of uninspected towing vessels;
- (7) Operator of uninspected passenger vessels.

(c) The following categories of ratings are established in Part 12 of this Chapter. When used in this part, the following terms mean an individual holding a valid merchant mariner's document to serve in that capacity issued under Part 12 of this chapter.

- (1) Able seaman;
- (2) Ordinary seaman;
- (3) Qualified member of the engine department;
- (4) Tankerman;
- (5) Lifeboatman;
- (6) Wiper;



## (7) Steward's department (F.H.).

**Subpart C—Manning Requirements; All Vessels****§ 15.401 Employment and service within restrictions of license or document.**

A person may not employ or engage an individual, and an individual may not serve, onboard a vessel subject to this Part unless the individual holds a valid license, certificate of registry, or merchant mariner's document authorizing service in the capacity in which the individual is engaged or employed and the individual serves within any restriction placed on the license, certificate of registry, or merchant mariner's document.

**§ 15.405 Familiarity with vessel characteristics.**

Each licensed, registered, or certificated individual must become familiar with the relevant characteristics of the vessel on which engaged prior to assuming his or her duties. As appropriate, these include but are not limited to: general arrangement of the vessel; maneuvering characteristics; proper operation of the installed navigation equipment; firefighting and lifesaving equipment; stability and loading characteristics; emergency duties; and main propulsion and auxiliary machinery, including steering gear systems and controls.

**Subpart D—Manning Requirements; Inspected Vessels****§ 15.501 Certificate of inspection.**

(a) The certificate of inspection (COI) issued by an Officer in Charge, Marine Inspection (OCMI), to a vessel required to be inspected under 46 U.S.C. 3301 specifies the minimum complement of officers and crew necessary for the safe operation of the vessel.

(b) The manning requirements for a particular vessel are determined by the OCMI after consideration of the applicable laws, the regulations in this part, and all other factors involved, such as: Size and type of vessel, installed equipment, proposed routes of operation, cargo carried, type of service in which employed, degree of automation, use of labor saving devices, and the organizational structure of the vessel.

**§ 15.505 Changes in the certificate of inspection.**

All requests for changes in manning as indicated on the certificate of inspection must be made to the OCMI who last issued the certificate of inspection, unless the request is made in conjunction with an inspection for

certification, in which case the request should be addressed to the OCMI conducting the inspection.

**§ 15.510 Right of appeal.**

Whenever any person directly interested in or affected by any decision or action of any OCMI, feels aggrieved by such decision or action with respect to manning requirements, the person has the right to appeal such decision or action under the provisions of § 2.01-70 of this Chapter. Pending the determination of the appeal, the crew specified on the certificate of inspection must be carried.

**§ 15.515 Compliance with certificate of inspection.**

(a) Except as provided by § 15.725, no vessel may be operated unless it has in its service and on board the complement required by the certificate of inspection.

(b) Any vessel subject to inspection under 46 U.S.C. 3301 must, while on a voyage, be under the direction and control of an individual who holds an appropriate license issued by the Coast Guard. For the purposes of this paragraph:

(1) A voyage is the period of time necessary to transit from the port of departure to the final port of arrival.

(2) A port does not include an Outer Continental Shelf (OCS) facility as defined in 33 CFR Part 140.

**§ 15.520 Mobile offshore drilling units [Reserved].****§ 15.525 Reference to other parts.**

Parts 31 and 35 of this Chapter contain additional manning requirements applicable to tank vessels.

**Subpart E—Manning Requirements; Uninspected Vessels****§ 15.601 General.**

The following sections of Subparts F, G, and H of this Part contain provisions concerning manning of uninspected vessels; §§ 15.701, 15.705, 15.710, 15.720, 15.730, 15.801, 15.805, 15.810, 15.820, 15.825, 15.840, 15.850, 15.855, 15.905, 15.910, and 15.915.

**§ 15.605 Licensed operators for uninspected passenger vessels.**

Each self-propelled, uninspected vessel carrying not more than six passengers, as defined by 46 U.S.C. 2101(21)(D), must be under the direction and control of an individual licensed by the Coast Guard.

**§ 15.610 Licensed operators for uninspected towing vessels.**

Every uninspected towing vessel which is at least 26 feet in length measured from end to end over the deck

(excluding sheer) must be under the direction and control of an individual licensed by the Coast Guard. This does not apply to a vessel of less than 200 gross tons engaged in the offshore mineral and oil industry if the vessel has offshore mineral and oil industry sites or equipment as its ultimate destination or place of departure.

**Subpart F—Limitations and Qualifying Factors****§ 15.701 Officers Competency Certificates Convention, 1936.**

(a) This section implements the Officers Competency Certificates Convention, 1936, and applies to each vessel documented under the laws of the United States navigating seaward of the Boundary Lines in Part 7 of this Chapter, except:

- (1) A public vessel;
- (2) A wooden vessel of primitive build, such as a dhow or junk;
- (3) A barge; and,
- (4) A vessel of less than 200 gross tons.

(b) The master, mates and engineers on any vessel to which this section applies must hold a license to serve in that capacity issued by the Coast Guard under Part 10 of this Chapter.

(c) A vessel to which this section applies, or a foreign flag vessel to which the Convention applies, may be detained by a designated official until that official is satisfied that the vessel is in compliance with the Convention. "Designated official" includes Coast Guard officers, Coast Guard petty officers and officers or employees of the Customs Service.

(d) Whenever a vessel is detained, the owner, charterer, managing operator, agent, master, or individual in charge may appeal the detention within five days under the provisions of § 2.01-70 of this Chapter.

**§ 15.705 Watches.**

(a) Title 46 U.S.C. 8104 is the law applicable to the establishment of watches aboard certain U.S. vessels. The establishment of adequate watches is the responsibility of the vessel's master. The Coast Guard interprets the term "watch" to be the direct performance of vessel operations, whether deck or engine, where such operations would routinely be controlled and performed in a scheduled and fixed rotation. The performance of maintenance or work necessary to the vessel's safe operation on a daily basis does not in itself constitute the establishment of a watch. The minimal safe manning levels specified in a



vessel's certificate of inspection takes into consideration routine maintenance requirements and ability of the crew to perform all operational evolutions, including emergencies, as well as those functions which may be assigned to persons in watches.

(b) Subject to exceptions, 46 U.S.C. 8104 requires that when a master of a seagoing vessel of more than 100 gross tons establishes watches for the licensed individuals, sailors, coal passers, firemen, oilers and watertenders, the personnel shall be "divided, when at sea, into at least three watches and shall be kept on duty successively to perform ordinary work incident to the operation and management of the vessel." The Coast Guard interprets "sailors" to mean those members of the deck department other than licensed officers, whose duties involve the mechanics of conducting the ship on its voyage, such as helmsman (wheelman), lookout, etc., and which are necessary to the maintenance of a continuous watch. "Sailors" is not interpreted to include able seamen and ordinary seamen not performing these duties.

(c) Subject to exceptions, 46 U.S.C. 8104(g) permits the licensed individuals and crew members (except the coal passers, firemen, oilers, and watertenders) to be divided into two watches when at sea and engaged on a voyage of less than 600 miles on the following categories of vessels:

- (1) Towing vessel;
- (2) Offshore supply vessel; or,
- (3) Barge.

(d) Subject to exceptions, 46 U.S.C. 8104(h) permits a licensed individual operating an uninspected towing vessel that is at least 26 feet in length measured from end to end over the deck (excluding sheer) to work not more than 12 hours in a consecutive 24 hour period except in an emergency. The Coast Guard interprets this, in conjunction with other provisions of the law, to permit licensed individuals serving as operators of uninspected towing vessels that are not subject to the provisions of the Officers' Competency Certificates Convention, 1936, to be divided into two watches regardless of the length of the voyage.

(e) Fish processing vessels are subject to various provisions of 46 U.S.C. 8104 concerning watches.

(1) For fish processing vessels that entered into service before January 1, 1988, the following watch requirements apply to the licensed officers and deck crew:

- (i) If over 5000 gross tons—three watches.

(ii) If more than 1600 gross tons and not more than 5000 gross tons—two watches.

(iii) If not more than 1600 gross tons—no watch division specified.

(2) For fish Processing vessels which enter into service after December 31, 1987, the following watch requirements apply to the licensed officers and deck crew:

(i) If over 5000 gross tons—three watches.

(ii) If not more than 5000 gross tons and having more than 16 individuals on board primarily employed in the preparation of fish or fish products—two watches.

(iii) If not more than 5000 gross tons and having not more than 16 individuals on board primarily employed in the preparation of fish or fish products—no watch division specified.

#### § 15.710 Working hours.

In addition to prescribing watch requirements, 46 U.S.C. 8104 sets limitations on the working hours of licensed individuals and crew members, prescribes certain rest periods, and prohibits unnecessary work on Sundays and certain holidays when the vessel is in a safe harbor. It is the responsibility of the master or person in charge to ensure that these limitations are met. However, under 46 U.S.C. 8104(f), the master or other licensed individual can require any part of the crew to work when, in his or her judgment, they are needed for:

- (a) Maneuvering, shifting berth, mooring, unmooring;
- (b) Performing work necessary for the safety of the vessel, or the vessel's passengers, crew, or cargo;
- (c) Saving of life on board another vessel in jeopardy; or,
- (d) Performing fire, lifeboat, or other drills in port or at sea.

#### § 15.715 Automated vessels.

(a) Coast Guard acceptance of automated systems to replace specific personnel or to reduce overall crew requirements is predicated upon the capabilities of the system, the system's demonstrated and continuing reliability, and a planned maintenance program that ensures continued safe operation of the vessel.

(b) The OCMI considers the capabilities of an automated system in establishing initial manning levels; however, until the system is proven reliable, a manning level adequate to operate in a continuously attended mode will be specified on a vessel's COL. It remains the responsibility of the vessel's master to determine when a continuous watch is necessary.

#### § 15.720 Use of non-U.S. licensed and/or documented personnel.

(a) United States vessels which need to replace one or more persons while on a foreign voyage and outside the jurisdiction of the United States, in order to meet manning requirements, may utilize non-U.S. licensed and documented personnel until the vessel's first return to a U.S. port. The master must always be a U.S. citizen.

(b) The master shall assure that any replacement will be with an individual who holds a license or document which is equivalent in experience, training, and other qualifications to the U.S. license or document required for the position and that the person possesses or will possess the training required of the position, including an ability to communicate to the extent required by § 15.730.

#### § 15.725 Sailing short.

Whenever a vessel is deprived of the service of a member of its complement, and the master or person in charge is unable to find appropriate licensed or documented personnel to man the vessel, the master or person in charge may proceed on the voyage, having determined the vessel is sufficiently manned for the voyage. A report of sailing short must be filed in writing with the Officer in Charge, Marine Inspection (OCMI) having cognizance for inspection in the area in which the vessel is operating, or the OCMI within whose jurisdiction the voyage is completed. The report must explain the cause of each deficiency and be submitted within twelve hours after arrival at the next port. The actions of the master or person in charge in such instances are subject to review and it must be shown the vacancy was not due to the consent, fault or collusion of the master or other individuals specified in 46 U.S.C. 8101(e). A civil penalty may be assessed against the master or person in charge for failure to submit the report.

#### § 15.730 Language requirements.

(a) The provisions of 46 U.S.C. 8702 relating to language apply generally to vessels of at least 100 gross tons except:

- (1) Vessels operating on rivers and lakes (except the Great Lakes);
- (2) A manned barge (except a seagoing barge or a barge to which Chapter 37 of 46 U.S.C. applies);
- (3) A fishing vessel, fish tender vessel, whaling vessel, or yacht;
- (4) A sailing school vessel with respect to sailing school instructors and sailing school students;
- (5) An oceanographic research vessel with respect to scientific personnel;



(6) A fish processing vessel which entered into service before January 1, 1988, and is not more than 1600 gross tons or which enters into service after December 31, 1987, and has not more than 16 individuals on board primarily employed in the preparation of fish or fish products; and,

(7) All fish processing vessels with respect to those personnel primarily employed in the preparation of fish or fish products or in a support position not related to navigation.

(b) 46 U.S.C. 8702(b) requires that on board vessels departing U.S. ports "75 percent of the crew in each department on board is able to understand any order spoken by the officers."

(c) The words "able to understand any order spoken by the officers" relates to any order to a member of the crew when directing the performance of that person's duties and orders relating to emergency situations such as used for response to a fire or in using lifesaving equipment. It is not expected that a member of the deck department understand terminology normally used only in the engine room or vice versa.

(d) Whenever information is presented to the Coast Guard that a vessel fails to comply with the specified language requirements the Coast Guard investigates the allegation to determine its validity. In determining if an allegation is factual, the Coast Guard may require a demonstration by the licensed individuals and crew that appropriate orders are understood. The demonstration will require that orders be spoken to the individual members of the crew by the licensed individuals in the language ordinarily and customarily used by the licensed individuals. The orders must be spoken directly by the licensed individual to the crew member and not through an interpreter. Signs, gestures, or signals may not be used in the test. The Coast Guard representative will specify the orders to be given and will include not only daily routine but orders involving emergencies, either of a departmental or of a general nature. This test will be conducted, if possible, at a time reasonably in advance of the vessel's departure, to avoid delays.

#### Subpart G—Computations

##### § 15.801 General.

The Officer in Charge, Marine Inspection (OCMI) will determine the specific manning levels for vessels required to have certificates of inspection by Part B of Subtitle II of Title 46 U.S. Code. The masters of all vessels, whether certificated or not, are responsible for properly manning vessels in accordance with the

applicable laws, regulations, and international conventions.

##### § 15.805 Master.

(a) There must be an individual holding an appropriate license as master in command of each of the following vessels:

(1) Every self-propelled, seagoing documented vessel of 200 gross tons and over.

(2) Every self-propelled inspected vessel.

(3) Every inspected passenger vessel.

(b) Every vessel documented under the laws of the United States must be under the command of a U.S. citizen.

##### § 15.810 Mates.

(a) The minimum number of licensed mates required to be carried on every inspected self-propelled seagoing and Great Lakes vessel, and every inspected seagoing passenger vessel is as follows:

(1) Vessels of 1000 gross tons or more—three licensed mates (except when on a voyage of less than 400 miles from port of departure to port of final destination—two licensed mates).

(2) Vessels of 100 or more gross tons but less than 1000 gross tons—two licensed mates (except vessels of at least 100 but less than 200 gross tons on voyages which do not exceed 24 hours in duration—one licensed mate).

(3) All offshore supply vessels of 100 gross tons or more—two licensed mates (except when on a voyage of less than 600 miles—one licensed mate). A voyage includes the accrued distance from port of departure to port of arrival and does not include stops at offshore points.

(4) All vessels of less than 100 gross tons—one licensed mate (except vessels on voyages not exceeding 12 hours in duration may, if the OCMI determines it to be safe, be operated without licensed mates).

(b) An individual in charge of the navigation or maneuvering of a self-propelled, uninspected, documented, seagoing vessel of 200 gross tons or over must hold an appropriate license authorizing service as mate.

(c) The OCMI may increase the minimum number of mates indicated in paragraph (a) of this section where it is deemed the vessel's characteristics, route, or other operating conditions create special circumstances requiring an increase.

(d) The Commandant will consider reductions to the number of mates required by this section when special circumstances allowing a vessel to be safely operated can be demonstrated.

##### § 15.812 Pilots.

(a) The following vessels, when underway and not sailing on register, must be under the direction and control of a pilot:

(1) Coastwise seagoing vessels propelled by machinery and subject to inspection under 46 U.S.C. Chapter 33, and seagoing tank barges subject to inspection under 46 U.S.C. Chapter 37, except when seaward of pilotage waters.

(2) Vessels operating on the Great Lakes propelled by machinery and subject to inspection under 46 U.S.C. Chapter 33, and tank barges subject to inspection under 46 U.S.C. Chapter 37.

(b) (Reserved)

(c) The requirements of paragraph (a) of this section are satisfied when the vessel is under the direction or control of either:

(1) A first class pilot holding a valid license issued by the Coast Guard, acting within the restrictions on his or her license; or,

(2) An individual holding a valid license issued by the Coast Guard as master, mate, or operator, employed aboard a vessel within the restrictions on his or her license and the limitations of paragraphs (d) and (e) of this section, provided he or she:

(i) Has reached the age of 21 years;

(ii) Complies with the currency of knowledge provisions of 46 CFR 10.713 of this chapter; and,

(iii) Has a current physical examination in accordance with the provisions of 46 CFR 10.709.

(d) A licensed master or mate qualifying under paragraph (c)(2) of this section may serve as pilot of a coastwise seagoing vessel or a Great Lakes vessel, of not more than 1600 gross tons propelled by machinery and subject to inspection for certification, provided the individual has four round trips over the route to be traversed, while in the wheelhouse as watchstander or observer. One of the round trips must be made during the hours of darkness if the route is to be traversed during darkness.

(e) A licensed individual qualifying under paragraph (c)(2) of this section may serve as pilot of coastwise seagoing tank barges or tank barges operating upon the Great Lakes, totaling not more than 10,000 gross tons carrying cargoes subject to the provisions of 46 U.S.C. Chapter 37, provided the individual:

(1) Has twelve round trips over the route to be traversed, three of which must be made during the hours of darkness if the route is to be traversed during darkness, as an observer or



under instruction in the wheelhouse; and,

(2) Has at least six months' service in the deck department on towing vessels engaged in towing operations.

(f) (Reserved)

(g) In any instance when the qualifications of a person discharging the requirement for pilotage through the provisions of this Subpart are questioned by the Coast Guard, the individual shall, within a reasonable time, provide the Coast Guard with documentation proving compliance with paragraph (c) of this section and the applicable portion(s) of paragraph (d) or (e) of this section.

#### § 15.815 Radar observers.

(a) Each person in the required complement of licensed deck individuals, including the master, on inspected vessels of 300 gross tons or over which are radar equipped, shall hold a valid endorsement as radar observer.

(b) Each person who is employed or serves as pilot in accordance with Federal law on board vessels of 300 gross tons or over which are radar equipped, shall hold a valid endorsement as radar observer.

#### § 15.820 Chief engineer.

(a) There must be an individual holding an appropriate license as chief engineer or a license authorizing service as chief engineer employed on board the following inspected mechanically propelled vessels:

(1) seagoing or Great Lakes vessels of 200 gross tons and over.

(2) offshore supply vessels of more than 200 gross tons.

(3) inland (other than Great Lakes) vessels of 300 gross tons and over, if the OCMI determines that a licensed individual responsible for the vessel's mechanical propulsion is necessary.

(b) An individual engaged or employed to perform the duties of chief engineer on a mechanically propelled, uninspected, seagoing, documented vessel of 200 gross tons or over must hold an appropriate license authorizing service as a chief engineer.

#### § 15.825 Engineers.

(a) An individual in charge of an engineering watch on a mechanically propelled, seagoing, documented vessel of 200 gross tons or over, other than an individual described in § 15.820, must hold an appropriate license authorizing service as an assistant engineer.

(b) The Officer in Charge, Marine Inspection determines the minimum number of licensed engineers required

for the safe operation of inspected vessels.

#### § 15.830 Radio officers.

Radio officers are required on certain merchant vessels of the United States. The determination of when a radio officer is required is based on the Federal Communications Commission requirements.

#### § 15.835 Staff officers.

Staff officers, when carried, must be registered as specified in Part 10 of this Chapter.

#### § 15.840 Able seamen.

(a) With certain exceptions, 46 U.S.C. 8702 applies to all vessels of at least 100 gross tons. At least 65 percent of the deck crew of these vessels, excluding licensed individuals, must be able seamen. For vessels permitted to maintain a two watch system, the percentage of able seamen may be reduced to 50 percent.

(b) Able seamen are rated as: unlimited, limited, special, offshore supply vessel, sail, and fishing industry, under the provisions of Part 12 of this Chapter. 46 U.S.C. 7312 specifies the categories of able seamen (i.e., unlimited, limited, etc.) necessary to meet the requirements of 46 U.S.C. 8702.

(c) It is the responsibility of the master or person in charge to ensure that the able seamen in the service of the vessel meet the requirements of 46 U.S.C. 7312 and 8702.

#### § 15.845 Lifeboatmen.

The number of lifeboatmen required for a vessel are specified in the parts of the regulations dealing with the inspection of that specific type of vessel.

#### § 15.850 Lookouts.

The requirements for the maintenance of a proper lookout are specified in Rule 5 of the International Regulations for Preventing Collisions at Sea, 1972, and Rule 5 of the Inland Navigational Rules Act of 1980 (33 U.S.C. 2005). Lookout is a function to be performed by a member of a navigational watch.

#### § 15.855 Cabin watchmen and fire patrolmen.

(a) On vessels carrying passengers at night, the master or person in charge shall ensure that a suitable number of watchmen are in the vicinity of the cabins or staterooms and on each deck, to guard against and give alarm in case of fire or other danger.

(b) On a fish processing vessel of more than 100 gross tons, there must be a suitable number of watchmen trained in firefighting on board when hot work

is being done, to guard against and give alarm in case of a fire.

### Subpart H—Equivalents

#### § 15.901 Licenses required on board inspected vessels of less than 100 gross tons.

(a) A license authorizing service as mate or pilot of vessels over 200 gross tons will also authorize service as master on vessels of not more than 100 gross tons.

(b) A license which authorizes the holder to serve as master or mate of a mechanically propelled vessel or a sail vessel subject to inspection, also authorizes the holder to serve as master or mate, respectively, of a passenger barge, subject to the route and tonnage restrictions on the license.

(c) A license which authorizes the holder to serve as master or mate of an auxiliary sail vessel subject to inspection, also authorizes the holder to serve as master or mate, respectively, of mechanically propelled or sail vessels, subject to the route and tonnage restrictions on the license.

#### § 15.905 Uninspected passenger vessels.

An individual holding a license as master or mate is authorized to serve as an operator of uninspected passenger vessels within any restrictions on the individual's license.

#### § 15.910 Uninspected towing vessels.

(a) An individual of 21 years or more of age holding a license as master, or a license as mate on vessels over 200 gross tons, is authorized to serve as operator of uninspected towing vessels within any restrictions on the individual's license. A mate may, however, only serve as operator on domestic routes.

(b) Whenever an uninspected towing vessel is under the direction and control of a person holding a license authorizing service as second-class operator of uninspected towing vessels, a person holding a license authorizing service as operator of uninspected towing vessels must be on board as a member of the crew.

(c) An individual of 19 years or more of age holding a license which authorizes service as mate of vessels of not more than 200 gross tons authorizes the holder to serve as second-class operator of uninspected towing vessels within any restrictions on the individual's license.

#### § 15.915 Engineer licenses.

(a) The following licenses authorize the holder to serve on the vessels noted



within any restrictions on the individual's license:

(1) A designated duty engineer license authorizes service as chief or assistant engineer on vessels of not more than 500 gross tons.

(2) A chief engineer (limited, oceans) license authorizes service as chief or assistant engineer on vessels of not more than 1600 gross tons upon any waters and any gross tons upon inland waters (other than the Great Lakes).

(3) A chief engineer (limited, near coastal) license authorizes service on vessels of not more than 1600 gross tons upon near coastal and inland waters and of any gross tons upon inland waters (other than the Great Lakes).

(b) An assistant engineer (limited) license authorizes the holder to serve on vessels of not more than 1600 gross tons upon any waters and of any gross tons upon inland waters (other than the Great Lakes).

#### SUBCHAPTER T—SMALL PASSENGER VESSELS (UNDER 100 GROSS TONS) [AMENDED]

#### PART 175—GENERAL PROVISIONS [AMENDED]

7. The authority citation for Part 175 is revised to read as follows, and all other authority citations with this part are removed:

Authority: 46 U.S.C. 3306; 49 CFR 1.46(b).

8. Section 175.01-1 is amended by revising paragraph (a) to read as follows:

##### § 175.01-1 General.

(a) The regulations in this Subchapter are prescribed by the Commandant of the Coast Guard to carry out the intent and purpose of Title 46, United States Code, sections 3301, 3302, 3307, 7101 and 8101, which require the inspection and certification of certain vessels of less than 100 gross tons carrying freight for hire or more than six passengers.

9. By revising § 175.10-13 to read as follows:

##### § 175.10-13 Headquarters.

This term means the office of the Commandant, United States Coast Guard, Washington, DC 20593-0001.

10. By adding a new § 175.10-15 to read as follows:

##### § 175.10-15 Master.

This term means the officer having command of the vessel.

#### PART 185—OPERATIONS [AMENDED]

11. The authority citation for Part 185 is revised to read as follows, and all

other authority citations with this Part are removed:

Authority: 46 U.S.C. 3306, 6101, 8105; 49 CFR 1.46(b).

12. By revising § 185.10-1 to read as follows:

##### § 185.10-1 Officers licenses.

The licensed individuals employed upon any vessel subject to the provisions of this Subchapter shall have their licenses in their possession and available for examination at all times when the vessel is operated.

13. By revising § 185.17-1 to read as follows:

##### § 185.17-1 Use prohibited by law.

No person may use a vessel subject to the provisions of this Subchapter in a negligent manner so as to endanger the life, limb, or property of any person. Violations of this Subpart involving use which is grossly negligent, subject the violator, in addition to any other penalties, to the criminal penalties prescribed in 46 U.S.C. 2302.

14. By revising § 185.19-1 to read as follows:

##### § 185.19-1 Duty of master.

The master of a vessel involved in a collision, accident or other casualty, to the extent possible without serious danger to his or her own vessel or persons aboard, shall render all practicable and necessary assistance to persons affected by the collision, accident, or casualty. The master shall also give his or her name, address, and the identification of his or her vessel to any person injured and to the owner of any property damaged.

15. By revising § 185.20-1 to read as follows:

##### § 185.20-1 Compliance with provisions of certificate of inspection.

The master of the vessel must ensure that all of the provisions of the certificate of inspection are strictly adhered to; however, the master may divert from the route prescribed in the certificate of inspection or take such other steps as deemed necessary and prudent to assist vessels in distress or for other similar emergencies.

16. By revising § 185.20-10 to read as follows:

##### § 185.20-10 Steering gear tests.

The master or mate of every vessel, before getting underway for a day's operation, shall test the steering gear, signaling whistle, controls and communication system.

17. By revising § 185.20-15 to read as follows:

##### § 185.20-15 Hatches.

It shall be the duty of the master of any vessel to assure that all exposed hatches are properly secured before getting underway for a voyage on other than protected waters.

18. By revising § 185.20-20 to read as follows:

##### § 185.20-20 Vessels carrying vehicles.

(a) Automobiles or other vehicles shall be stowed in such a manner as to permit their occupants to get out and away from them freely in the event of fire or other disaster. The decks, where necessary, shall be distinctly marked with painted lines to indicate the vehicle runways and the aisle spaces.

(b) The master shall take any necessary precautions to see that automobiles or other vehicles have their motors turned off and their emergency brakes set when the vessel is underway, and that the motors are not started until the vessel is secured to the landing. In addition, the vehicles at each end shall have their wheels securely blocked, while the vessel is being navigated.

(c) The master shall have appropriate "NO SMOKING" signs posted and shall take all necessary precautions to prevent smoking or carrying of lighted or smoldering cigars, cigarettes, etc., in the deck area assigned to automobiles or other vehicles.

19. Section 185.20-30 is amended by revising paragraph (c) to read as follows:

##### § 185.20-30 Use of auto pilot.

(c) All other hazardous navigational situations, the master shall ensure that:

(1) It is possible to immediately establish manual control of the ship's steering;

(2) A competent person is ready at all times to take over steering control; and,

(3) The changeover from automatic to manual steering and vice versa is made by, or under the supervision of the master or mate.

20. By revising § 185.22-1 to read as follows:

##### § 185.22-1 Duties.

(a) At all times during which bunks in passenger areas located below the main deck are occupied, the master shall designate a member of the vessel's crew as a patrolman.

(b) The patrolman shall be stationed in the vicinity of the cabins or staterooms and on each deck to guard against and give alarm in case of fire or other danger.



**§ 185.25-1 [Amended]**

21. In § 185.25-1, paragraphs (a) and (d) are amended by removing the phrase "operator in charge" and adding in its place the word "master."

22. By revising § 185.25-10 to read as follows:

**§ 185.25-10 Drills.**

The master shall conduct drills and give instructions as necessary to ensure that all crew members are familiar with their duties.

23. By revising § 185.25-15 to read as follows:

**§ 185.25-15 Officers' responsibilities.**

Nothing in the recommended emergency instructions in this Subpart shall exempt any officer from the exercise of good judgment in any emergency situation.

24. By revising § 185.25-20 to read as follows:

**§ 185.25-20 Tests of emergency position indicating radiobeacon (EPIRB).**

The master of the vessel shall ensure that:

(a) The EPIRB required in § 180.40-1 of this Subchapter is tested monthly, using the integrated test circuit and output indicator, to determine that it is operative; and,

(b) The EPIRB's battery is replaced after the EPIRB is used and before the date required by FCC regulations in 47 CFR Part 83.

**PART 186—[REMOVED AND RESERVED]**

25. By removing and reserving Part 186.

**PART 187—[REMOVED AND RESERVED]**

26. By removing and reserving Part 187.

J.C. Irwin,  
Vice Admiral, U.S. Coast Guard, Acting  
Commandant.

June 3, 1987.

[FR Doc. 87-23433 Filed 10-15-87; 8:45 am]

BILLING CODE 4910-14-M

**46 CFR Part 10**

[CGD 81-059b]

**Licensing of Pilots**

**AGENCY:** Coast Guard, DOT.

**ACTION:** Interim final rule.

**SUMMARY:** The Coast Guard is republishing its rules concerning professional requirements for pilot's

licenses in a revised organization and format. This is being done to make them more understandable, and compatible with the complete revision of the rules for the licensing of maritime personnel appearing elsewhere in this issue under docket [CGD 81-059]. The new format and organization is intended to make them clearer and easier to apply.

**DATES:** Comments must be received on this Interim Final Rule on or before January 14, 1988. Effective December 1, 1987.

**ADDRESSES:** Comments should be mailed to Commandant (G-CMC/21) (CGD 81-059b), U.S. Coast Guard, Washington, DC 20593-0001. Between 8:00 a.m. and 3:00 p.m., Monday through Friday, comments may be delivered to and will be available for inspection or copying at the Marine Safety Council (G-CMC/21), Room 2110, U.S. Coast Guard Headquarters, 2100 Second Street SW., Washington, DC 20593-0001, (202) 267-1477.

**FOR FURTHER INFORMATION CONTACT:**

Mr. John J. Hartke, Merchant Vessel Personnel Division (G-MVP/12), Room 1210, U.S. Coast Guard Headquarters, 2100 Second Street SW., Washington, DC 20593-0001, (202) 267-0217.

**SUPPLEMENTARY INFORMATION:** This Interim Final Rule is open to comments. Interested persons are invited to participate in this rulemaking by submitting written data, views, or arguments. Written comments should include the docket number (CGD 81-059b), the name and address of the person submitting the comments, and the specific section of the interim final rule to which each comment is addressed. Persons desiring an acknowledgment that their comment has been received should enclose a stamped, self-addressed postcard or envelope. All comments received will be considered before final action is confirmed.

The substance of these rules concerning the professional requirements for pilot's licenses was published as a Final Rule under docket (CGD 77-084) on June 24, 1985 (50 FR 26106) and subsequently modified on March 31, 1986 (51 FR 10837). The rules are being reformatted and reorganized in this rulemaking for consistency with the rules for licensing of maritime personnel which have been completely rewritten and appear as an interim final rule under docket CGD 81-059 appearing elsewhere in this issue. They are published without prior opportunity for notice and comment because they do not change the intent or interpretation of the rules as originally published. For this reason the Coast Guard has determined,

under 5 U.S.C. 553, that providing prior notice and opportunity for comment is unnecessary.

**Drafting Information**

The principal persons involved in drafting this rule are: Mr. John J. Hartke, Project Manager, Merchant Vessel Personnel Division and CDR Ronald C. Zabel, Project Attorney, Regulations and Administrative Law Division.

**Discussion of Reformatting and Reorganization**

The revision of the regulations concerning licensing of maritime personnel (46 CFR Part 10) appears elsewhere in this issue. That revision contains many provisions which duplicate portions of the rules pertaining to pilots, including the basic physical exam requirements, the acceptance of equivalent service, and examination topics; consequently these provisions have been modified or removed from the subpart concerning pilots.

Several of the sections have been reformatted and reorganized, both to be compatible with the general format of the remainder of 46 CFR Part 10 and to make the rules more understandable. Two provisions in particular have been reworded because they created some confusion. The Coast Guard has received numerous questions on how they were to be applied. These are the provisions concerning who can obtain an endorsement as first class pilot, and the provisions concerning removal of tonnage limitations. The preamble to the final rule clearly stated how these provisions would be applied. To eliminate the confusion, some of the explanatory material from the preamble has been added to the rule. In addition, endorsements as first class pilot will not be placed on licenses unless the individual is qualified as first class pilot of vessels over 1,600 gross tons, instead of 1,000 gross tons as currently noted. This is necessary to maintain compatibility with the new licensing structure and the manning provisions authorizing other license holders to serve as pilot. The new manning provisions provide that licensed masters and mates may serve as pilot on vessels of not over 1,600 gross tons. The provision authorizing operators of uninspected towing vessels to serve as pilot on coastwise seagoing tank barges totalling not more than 10,000 gross tons remains unchanged. Since specific endorsements with a tonnage limit of 1,600 gross tons or less are no longer necessary, they will no longer be issued by the Coast Guard. The Coast Guard will continue to issue first class pilots